

University of California, Los Angeles



THE
FRITZ L. HOFFMANN COLLECTION

A Gift of
Olga Mingo Hoffmann

1994



Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

THE
ARGENTINE IN THE
TWENTIETH CENTURY

The Modern World Series

- 1. THE EVOLUTION OF MODERN GERMANY.** By W. Harbutt Dawson.
- 2. MODERN RUSSIA.** By Gregor Alexinsky.
- 3. JAVA, SUMATRA, AND THE OTHER ISLANDS OF THE DUTCH EAST INDIES.** By A. Cabaton.
- 4. THE ARGENTINE IN THE TWENTIETH CENTURY.** By Albert B. Martinez and Maurice Lewandowski.
- 5. THE JAPANESE EMPIRE AND ITS ECONOMIC CONDITIONS.** By Joseph D'Autremer.

THE ARGENTINE IN THE TWENTIETH CENTURY

BY ALBERT B. MARTINEZ
UNDER-SECRETARY OF STATE . . . AND
MAURICE LEWANDOWSKI, DOCTOR IN LAW

With a PREFACE by M. ÉMILE LEVASSEUR, Membre
de l'Institut, and an INTRODUCTION by the late CH.
PELLEGRINI, Ex-President of the Argentine Republic.

Translated by BERNARD MIALL from the French
of the Third Edition, revised and brought up to date.

*With compliments
to Mr P. R. Thorpe*

WITH A MAP

Ch. Miall

1917 Blaines

T. FISHER UNWIN
LONDON: ADELPHI TERRACE

[*All rights reserved*]

09/5394210

CONTENTS

	PAGE
AUTHOR'S NOTE	xiii
AUTHOR'S PREFACE TO THE THIRD EDITION	xv
PREFACE TO THE FIRST EDITION	xxv
INTRODUCTION	xli
GENERAL PLAN AND METHOD OF THIS BOOK	55
THE ARGENTINE NATIONALITY	59

PART I.

THE ARGENTINE FROM THE ECONOMIC STANDPOINT.

CHAP

PAGE

I. THE GEOGRAPHY OF THE ARGENTINE 71

CLIMATE—SOIL—Geographical situation of the Argentine; its boundaries, its area.

Climate of various districts. The prevailing winds. Nature of the soil; its fertility; adaptation to the culture of cereals and the raising of live-stock—Transformation of virgin into fertile land—The Pampa—The cultivable area—Conditions favourable to production—The plague of locusts.

RIVERS—Their exceptionally favourable influence—The hydrographic system—Network of navigable river-ways: the Río de la Plata, the Río Parana—Conditions of navigability—Canals.

PORTS—List of the principal ports, with a summary of their trade—Buenos Ayres: description of the port, its area, its capacity, tonnage; its docks—The Central Produce Market—Importance of Buenos Ayres in comparison with the great ports of the world—The port of La Plata—The port of Rosario; increase of its traffic; construction of the new harbour conceded to a French company—Bahía Blanca; its development—The decentralisation of traffic.

II. RAILWAYS 91

Rapid development of the railway system—Tabulation of its extension in each Province—Table showing the general results of its operation—List of the lines actually running.

List of railway companies, with the length of their roadways and their returns—The difficulty of obtaining these figures exactly—The tariffs of the railway companies—Form of concessions, and suppression of guarantees.

Comparison of the railway system of the Argentine with the railway systems of other countries—Proportion of mileage to area and population.

II.—*continued*—

Extension of the system in the near future, owing to the numerous concessions granted—The mileage of these concessions—Insufficiency of plans and previous examination—Examination of the most important concessions for which the capital is already guaranteed—The dimensions which the railway system will attain after the concessions are realised—Programme of narrow-gauge construction; its value.

Meeting of the Argentine with the Chilian railways across the range of the Andes—The aerial mining railway in the Province of La Rioja.

Railways in relation to agricultural development—Insufficiency of transport at the moment of harvest; its causes and remedies—Necessity of a better organisation which shall respond to the stress of production.

III. IMMIGRATION AND COLONISATION 113

Immigration is a vital problem for the Argentine—Table of the population per Province and per Territory. Its sparsity—The exceptional situation of the Argentine as the objective of European emigration—The poor results hitherto obtained through default of colonisation—The faulty division of the public lands—History of immigration in relation to colonisation—The nationality of immigrants.

PART II.

THE ARGENTINE AS AN AGRICULTURAL COUNTRY.

I. AGRICULTURE 125

NATURAL CONDITIONS—THE CONSTITUTION OF PROPERTY—The three principal agricultural districts—The northern, central, and southern districts—The division of crops and their varieties.

The constitution of rural property—The division of property—The great estates, called “estancias,” and their size.

The drawbacks of large properties—The necessity of a better subdivision of the public lands—The division into lots of large tracts of land, in order to encourage colonisation—The system of exploiting property.

AGRICULTURAL PRODUCTION—The progress realised in last seventeen years—Comparative yield of the chief products, wheat, flax, and maize—Lucerne; the importance of the crop and the excellent results obtained.

Increase of the area under seed—The total area cultivated in the agricultural years 1908-1909—The great agricultural belts.

The Province of Buenos Ayres, its agricultural development and its crops—The Province of Santa Fé—The Province of Córdoba—The Territory of the Central Pampa.

Agricultural machinery, its importation from abroad, and especially from the United States.

THE AGRICULTURAL YIELD—The yield of the soil in the different Provinces—Exceptional results in certain districts—Detailed calculation of the yield of a wheat farm—Two instances of great wealth realised by immigrants to the Argentine.

II.	THE PRODUCTION OF WHEAT IN THE ARGENTINE COMPARED WITH THE YIELD OF OTHER EXPORTING COUNTRIES	154
-----	---	-----

The world's wheat-harvest—Comparison between the statistics of consumption—The conditions of production in Russia and in the Argentine—Comparison with the United States, India and Canada—The prospects of the Argentine export trade in wheat.

III.	STOCK-RAISING	162
------	-------------------------	-----

The transformation of the old "estancia"—The principal stock-raising establishments; description, extent, number of heads of cattle and favourite breeds—The great "estancias" of the South and Patagonia.

Approximate area of the soil devoted to cattle and sheep; general estimate of the numbers of cattle and sheep—Results of the census of 1908.—The capital represented by Argentine stock-raising.

IV.	THE VALUE OF THE SOIL	174
-----	---------------------------------	-----

Difficulties in estimating this value—Principal factors of valuation—Examples taken from lucerne fields and the forests of quebracho—Despite adverse circumstances, and with a few exceptions, there has always been a tendency for the price of land to rise—Alienation of lands acquired by conquest from the Indians; their enormous present value—The rise of value dates from 1902, and has hitherto continued without relapse—The causes of this rise, and its rational principles, according to an authoritative opinion.

Examples of valuation drawn from the sales of public lands—The rise of prices in the Provinces of Buenos Ayres, Córdoba, Santa Fé, and the Pampa, with figures indicating the prices realised in some large recent transactions.

V.	AGRICULTURAL INDUSTRIES	187
----	-----------------------------------	-----

SUGAR-CANE—Area of plantations—Statistics of production—Legislation affecting sugar—Consumption.

VINES—Area of vineyards planted—Production, consumption—Imperfect quality—Competition of foreign imports.

TOBACCO—Area of plantations—Value of the product—Defective preparation.

THE MULBERRY—The culture of the silk-worm might be established in the Argentine, but at present exists only in an experimental condition.

MATÉ—Large consumption of this product.—Statistics of foreign importation—Districts suitable for its growth.

COTTON—Physical conditions proper to its growth—The first favourable results in the Argentine—Its introduction into Chaco—Lack of manual labour for the development of this industry.

RUBBER—Existence of rubber plants in the Argentine—An unexploited source of wealth.

ARBORICULTURE—On account of the diversity of the climate, all fruit-trees can be grown in the Argentine—The various fruits cultivated in different regions—Amelioration of the products. The trade in fruit—Its development possible on account of the inversion of seasons as compared with Europe—Refrigeration applied to the transport of fruit—Regions particularly suitable for fruit-growing.

PART III.

THE ARGENTINE FROM THE COMMERCIAL AND INDUSTRIAL
POINT OF VIEW.

CHAP.		PAGE
I.	FOREIGN TRADE	211
	The important part played by the foreign trade of the Argentine—Table of imports and exports during recent years—Explanation of their respective movements—Favourable condition of the commercial balance.	
	Method of ascertaining the statistics of exports and imports—Errors in evaluation—Notes on the import duties on various articles—Variations of the custom duties—Export duties; their transitory characters—The trade in bullion.	
	IMPORTS.—Their classification according to their countries of origin—Value of imports from each country, with indications of the principal articles imported—The Argentine dependent upon other countries for a large number of manufactured articles—Concentration of imports at Buenos Ayres.	
	EXPORTS.—Their classification according to origin—Value of exports from each district, with indications of the chief articles exported—Decadence of the French trade with the Argentine and its causes.	
	Tabulation, according to importance of the principal products exported by the Argentine—Remarkable increase in agricultural and pastoral exports—Search for new outlets.	
	Eventual denunciation of commercial treaties—Projected new treaty with France—Causes of the superiority of English, German, and North American trade in the Argentine over French trade.	
	“Dumping” in the Argentine—A new client for the Argentine—Japan—Elements which make for the development of commercial activity in the Argentine.	
	The commercial balance—Results of the commercial balance—Its prime importance in respect of the prosperity of the country—It is this balance which compensates the issue of capital for the benefit of the foreign debt.	
II.	THE GREAT ARGENTINE INDUSTRIES	235
	The principal industries of the country are related to agriculture and cattle-breeding.	
	SUGAR-PLANTING, BOILING, etc.—Capital engaged—Tucuman the chief centre—Production and exportation—The sugar crisis—The Rosario Refinery.	
	FLOUR EXPORT TRADE—Capital invested—Equipment, steam flour-mills, grain-elevators—Production and exportation.	
	REFRIGERATION.—At present the chief industry of the country—Number of establishments—Table of exports of frozen and chilled meats—Capital invested—Development of the industry.	
	DAIRY INDUSTRIES.—The large establishments devoting themselves to these industries—Butter; cheese—Exports of butter; the development of which the dairy industries are capable.	
	BREWERIES.—Chief establishments—Production and consumption of beer during the years 1902-1907—Suppression of imports of foreign beer.	

II.—*continued*—

SPIRITS.—Decreased production of spirits.

LOOMS, TANNERIES.—Weaving and tanning are industries which at present exist in the Argentine only in a rudimentary condition, despite the conditions which are favourable to their development.

QUEBRACHO WOOD.—The centre of production—Applications—Companies engaged in the industry—Their results—Value of the products and the large profits to be expected.

TIMBER TRADE.—Varieties of timber and hard woods.

FISHERIES.—First results of this industry.

III. MINES, ELECTRICAL AND OTHER INDUSTRIES 250

The Argentine has not entered the industrial age—She has no coal-mines in operation, no natural motive forces of any importance.

MINES.—Symptoms of the awakening of the mining industry—Numerous lodes in the Andes—The mines of La Rioja and Catamarca—Mines in other provinces and territories—Mining legislation.

ELECTRIC INDUSTRIES.—Tramways; their development, their perfected equipment, and their profits—Progress of electric lighting—Telegraphs—Telephones.

VARIOUS INDUSTRIES.—List of various industries established in Buenos Ayres, according to the last census, with the value of their products.

Comparison between the statistics of 1895 and those of 1904—Progress realised in 1908—Workshops and factories.

IV. BANKS, THE BOURSE OR STOCK EXCHANGE, AND LIMITED COMPANIES 261

BANKS.—International character of Argentine banking—Evolution of banking machinery—List of the principal banks, with amount of capital and business done—Conditions peculiar to Argentine banking; the lack of movable reserves—Rates of interest on account, on deposit, and on advances—Statistics of the deposit accounts of the principal banks—Exchange operations: their decrease since the determination of a fixed monetary ratio—The Clearing House; the importance of its operations.

The Bank of the Nation.—Its history—The formation of its capital—Political interference in the nomination of its Directors—Statistics of its accounts—Rapid increase of deposits—Difficulty of realising capital—The resumption of payments.

The Bank of the Province of Buenos Ayres.—Its reorganisation—Its present prosperity.

Mortgage and Loan-Banks.—History of the *Banque Hypothécaire* of the Province of Buenos Ayres—Bankruptcy—Arrangement between the bank and its creditors—Proposal of reorganisation—Laws relating to mortgage in the Argentine—The National Mortgage Bank; statistics of business done—Joint-stock loan companies; their capital and amount of business done.

THE STOCK EXCHANGE (BOURSE).—History of this institution—Its importance; its functions; amount of business done—The decrease in its transactions since the cessation of speculation in currency or the monetary ratio.

The Bourse is a private establishment—Its membership and its regulations—Statistics of business done during the last ten

years—Securities quoted on the Buenos Ayres Bourse—Decrease in the total amount of business done during the last five years—The monetary reform of 1901 as a factor of this decrease—The place occupied by the Stock Exchange in the life of the nation.

Joint-Stock Companies.—The development of joint-stock companies—Legislation affecting such companies—Abuses committed in the formation of such companies, due to speculation—Statistics of capital invested in joint-stock companies before and after the speculative crises of 1890—Revival of such companies, in a sense more consistent with the development of the country.

PART IV.

ARGENTINE FINANCE.

I. THE ARGENTINE BUDGET 295

The financial situation—Continual increase of national expenditure—Great and rapid progress since 1891—Insufficiency of the means adopted to moderate this increase—The Budget Extraordinary and the Special Legislation Budget.

Causes of this increase of national expenditure—The increase of administrative requirements caused by an increasing population; this is the most natural cause, and that most easily justified—Increase of the public debt—The intervention of the State as the promoter or guarantor of important public undertakings—Exaggerated military expenses.

The total sum of national, provincial, and municipal expenses. The proportion per inhabitant—Comparison with other foreign countries in the matter of administrative expenses.

The national revenue—The revenue as organised by the Constitution, and its analysis—Indirect taxation—The customs the chief source of revenue—Direct taxation; its origin in the Argentine; its justification; its yield—Revenue of the industrial undertakings belonging to the State: railways, sewers, posts and telegraphs—The exploitation of the State lands.

Elasticity of the receipts, which follow the development and progress of the country—The accelerated increase of expenditure, and the resulting chronic deficit—Necessity of serious reforms.

II. THE PUBLIC DEBT 312

Statistics of the public debt on the 1st January 1909—History of the public debt—The first loans.

The financial crisis—Consolidated loans—The Romero arrangement—Loan for the redemption of guarantees—The internal public debt—The total of the Argentine public debt, and its annual cost in dividends and redemption—The proportion of financial charges as compared to other budgetary expenses.

The burden of the public debt is heavy, but not unduly heavy in relation to the productive power of the country—The necessity of restraining further issues and of converting old debts—The efforts of the Argentine to improve her credit.

III. THE DOUBLE CURRENCY 330

The persistence of the double currency—The history of paper money—The origins of the premium on gold, and its almost continual increase—The year 1890 and the depreciation of the currency—The causes of this depreciation; abuses in the issue of paper, caused by a bad financial and administrative policy.

Remedies suggested—Rosa's law fixing the value of paper money and establishing a *Caisse de Conversion*—Opposition to this law—Its beneficent effect upon agriculture and stock-raising, which had especial need of a stable medium of exchange—Reserve fund created with a view to converting paper money; its vicissitudes in the past and its present constitution—The present monetary situation.

IV. THE CAISSE DE CONVERSION 342

The principles on which the establishment of this institution is based—The necessity of a rapid redemption of fiduciary money—The doubtful success of this programme—New issues of notes—New attributes of the *Caisse* dating from 1899—The exchange of paper for gold and *vice versa*—The development of this system of exchange—The authority attaching to the *Caisse*.

V. THE BALANCE-SHEET OF THE ARGENTINE ACCORDING TO THE INVENTORY OF SECURITIES 349

THE INVENTORY OF MOVABLE PROPERTY OR SECURITIES—The capital represented by movable properties, stocks, bonds, shares, etc., is the only kind of capital which lends itself to statistics—The great groups of movable properties: National Funds, Railway Shares, Insurance Companies, Foreign Banks, Mortgage Companies, and agricultural and industrial undertakings.

The nominal amount of capital represented by movable values—Table of the annual revenues of the same, and the sinking fund—Division of this revenue among the different countries having capital invested in the Argentine.

English capital—The importance of English investments in all branches of Argentine activity—The benefits of a reaction in favour of Argentine capital—French capital; its small value compared to English capital—German capital and its rapid increase—Approximate valuation of that portion of revenue remaining in the Argentine, and of that which goes to the various nations having capital invested in the country.

THE BALANCE-SHEET—The assets are principally composed of exportation values; the liabilities, by the value of imports—The revenue of investments exported to foreign countries, and the total of the sums expended by the Argentines abroad—Table giving a summarised Balance-sheet and the balance in favour of the Argentine—International exchanges and the importation of gold confirm this favourable situation—Argentine capital will presently play a more important part in the country as compared with foreign capital.

CONCLUSIONS 370

INDEX 373

AUTHOR'S NOTE

AT the outset of this work our thanks are due to Señor J. Romero, ex-Minister of Finance, who has given us the benefit of his experience for this study of current Argentine affairs. Señor Romero is the author of the monetary law of 1881, and was responsible for the arrangement of the foreign Debt of 1892; he is to be numbered among those Ministers who have rendered, in the course of their financial administration, the greatest services to their country.

We must also pay tribute to the memory of two eminent gentlemen, no longer living, whose death the Argentine deploras; who had desired, by aiding us with their advice, to be in some sort collaborators in this work, destined as it is to make popularly known to European readers the present prosperity of the Argentine Republic.

We must express our utmost gratitude first of all to Signor Pellegrini, that eminent man who assumed the Presidency of the Republic in a difficult moment of her history. We are greatly honoured in that we are able to associate his name with this book, by publishing, as an Introduction, a most interesting study of the formation of the Argentine Republic, which was one of the last writings of this eminent citizen.

And we must not forget the friendly and conscientious assistance rendered us so willingly by one of the most notable figures in the financial world of the Republic: M. Ernest Tornquist, whose death was also most truly a national bereavement. M. Tornquist exercised a consider-

able influence over the trend of affairs, and he most notably contributed to the work of economic expansion, and financial and monetary reorganisation, of which the Argentine is to-day feeling the beneficial effects. We have profited, in writing this book, by his incontestable competence, and respectfully salute the memory of this willing friend and collaborator.

AUTHOR'S PREFACE TO THE THIRD EDITION

THREE years have elapsed since the appearance of the first edition of this book, and we have to-day the satisfaction of being able to state that the development of the country has fully responded to our optimistic forecast. Short as such a period is in the life of a people, it has been extraordinarily full; the ground covered is so considerable that it is of a larger Argentine that we now have to revise the picture, while recording its pacific victories in the economic field.

No country in the world has ever in so short a time realised so rapid a progress, in respect of the produce of the soil. In 1904-1905 the area under culture was as yet no more than $22\frac{1}{2}$ millions of acres, while to-day, in the agricultural year of 1908-9, it attains the figure of 35 millions of acres, representing an increase of nearly 75 per cent. In the same period the value of cereals, which was about £1,600,000 in 1904-5, has also increased in very large proportion.

Taking as basis the figures furnished by the Division of Rural Economy and Statistics of the Ministry of Agriculture, we may estimate that the harvest of 1908-9 will give a yield of, 13,811,000 (metric) tons,* which may be divided as follows: Wheat 5,760,000 tons, flax 1,228,000, oats 823,000, and maize 6,000,000 tons. The value of the harvest, according to the prices ruling in 1908, will amount to 1045 millions of paper piastres, or £92,000,000.

To appreciate these figures at their true value, one must remember that twenty-five years ago the Argentine was still importing foreign flour to make her bread, while to-day the

* Reducing the above quantities to bushels of 56 lbs. weight, the cereal harvest is estimated at: wheat, 230,000,000 bushels; oats, 33,000,000; maize, 240,000,000. The metric ton is 34·5 lbs. lighter than the English.

production of grain represents nearly a ton per head per inhabitant.

It is the same with maize: twenty years ago it was hardly grown, and to-day the harvest amounts to 6 millions of tons; furnished almost entirely by two provinces—those of Buenos Ayres and Santa Fé.

As for stock-raising, we cannot make a comparison with any very recent statistics—since the last available date back to 1895—but we may say that the general census which has just been undertaken, under the direction of Señor Alberto B. Martinez, has revealed a wealth whose magnitude surpasses all conception. To-day the Argentine counts 29,116,625 horned cattle, 67,211,754 sheep, 7,531,376 horses, 750,125 mules and asses, and 3,945,086 goats; which is equivalent, at the present time, to a capital of 1481 millions of paper piastres, or £130,000,000. By referring to the figures for 1895, which give us 21,701,526 horned cattle and 4,446,859 horses, we may judge of the immense progress which the Argentine has realised in a few years, thanks to the transformation of $3\frac{3}{4}$ millions of acres of soil into magnificent pastures of lucerne.

On the other hand we must, it is true, note a decrease of 7,167,808 head of sheep, which are gradually falling back before the advance of agriculture and the increasing numbers of cattle. This harmless animal contents itself with a poorer soil, and does not fear the intemperance of the seasons; also sheep-raising is now giving place, in our central provinces, to other more remunerative industries, and the sheep are taking refuge in great quantities in the southern regions.*

If we consider these facts with a view to noting the precise direction in which the Argentine is to-day evolving, we shall observe a marked tendency towards the extension of agriculture proper, and a check in the progress of stock-raising, which appears—at least for the moment—to be developing more slowly than of old.

This characteristic change is perceptible each year in the

* Patagonia, and even Tierra del Fuego, with its terrible winds and drenching rain, is now being occupied by the sheep-rancher, to the destruction of the guanaco and the natives; frost being rare save on the ranges, and the pasture luxurious.—[TRANS.]

statistics of foreign trade. The exportation of agricultural products amounted, for the year 1907, to the value of 164 millions of piastres (gold), or £32,800,000 as against £32,400,000 and £34,000,000 for the two preceding years. As for the products of stock-raising, the value in 1907 amounted only to £24,800,000, while in the two preceding years it was £24,800,000 and £28,200,000; and ten years ago it exceeded by more than £10,000,000 the value of the agricultural exports.

Many causes are contributing to this transformation of a pastoral into an agricultural country; their action is progressive, and they are profoundly modifying the aspect of the land, by gradually substituting, for the monotonous horizons of the ranchero's prairies, the variety of cultured fields.

While the prices of cereals have always attained a remunerative figure, those of the bestial, on the contrary, have now and then suffered sensible depression; and, what is still more serious, the ranching industries have also suffered, as they did in 1908, by a lack of demand for hides and wool, and simultaneously for an insufficient outlet for meats.

The dried-meat (*saladeros*) industry, which used to absorb annually nearly two million beasts, has by now been almost entirely removed in the direction of Uruguay, or the Brazilian province of Rio Grande do Sul, and is little more than a memory; as this primitive and rudimentary method of preparation had perforce to give way before the more hygienic and progressive chilled and frozen meat trade. The chilled beef industry, however, upon which such hopes were founded, has not of late years made any conquest of new markets, England being almost the Republic's only customer.

As for the exportation of cattle on the hoof, it is greatly impeded in Europe by prohibitive measures, which diplomacy, by means of commercial treaties, is endeavouring to remove. Yet were the desired advantages obtained, the result would be doubtful on account of the considerable rise in the price of cattle and the high freights which are charged for the transport of living stock. It therefore results that this particular species of exploitation is at an obvious disadvantage in the face of the refrigerating trade.

If the raising of stock and its dependent industries have not, in these last few years, realised a progress comparable to that of agriculture, we must by no means conclude that this department of production has ceased to be an element of national prosperity. Quite on the contrary: thanks to the efforts made to better affairs by happy selections in the breed of animals, the value of live stock has increased in surprising proportions, and the Argentine still retains its rank as second to the United States as a stock-raising country.

What we have endeavoured to emphasise, as a new manifestation of the national activity during the last few years, is that the development of the country has been in especial along agricultural lines; an incontestable proof of progress, and an index of a higher degree of civilisation.

Agriculture, as compared to stock-raising, is, from the economical point of view, a source of wealth having quite a different bearing upon the general prosperity and welfare of a nation. It is the fairy which little by little transforms the vast plains of the Argentine pampas into a more animated landscape, peopled by numerous homesteads, foci of colonisation, which then develop into villages, which in a score of years may perhaps be important cities. Agriculture summons the railroad, stimulates emigration, promotes the division of the soil, creates the small proprietor; it influences even the manners and morals of the inhabitants, for it demands more labour, more intelligence than ranching; nimbler wits, more method, greater foresight.

The comparison between the two great industries of the Argentine is summed up in the following fact: a property comprising 25,000 acres of pasture can be put into working order and managed by a staff of ten to twelve men. For an estate of 1500 acres under culture, one may estimate that forty to fifty persons, grouped in families, may easily live upon the soil and prosper. We may perceive by this the great superiority of agriculture from the point of view of the general interest of the country. It demands and supports a denser population; it permits the grouping of this population in villages and cities, it creates, in proportion, with a smaller capital, a great wealth of produce; in short, it contributes on

the one hand towards increasing the wealth of the country by participating largely in its exports, and on the other it increases its power of consumption, by absorbing a greater number of imported products.

Thus the evolution of the Argentine towards agriculture constitutes a real progress, and if the country continues to follow the same path, its development will assuredly not be arrested by lack of soil. The 35 to 37 millions of acres already reclaimed, and at present under culture, represent at the most a tenth of the total area of cultivable land, which is estimated roughly at 375 millions of acres, of which at least 125 millions are perfectly adapted to the culture of cereals. The four Provinces of Buenos Ayres, Santa Fé, Cordoba, Entre Rios, and the Territory of Pampa Central alone contain some $32\frac{1}{2}$ millions of land under the plough, while there remains about 170 millions of acres of land which is just as fertile, and which without manuring or preparation would yield a splendid crop from the first year of tilth.

This transformation into an agricultural country has already borne fruit. The figures relating to external commerce, compared with the world's statistics of cereal production, show the present position of the Argentine among the great exporting nations.

It is the Argentine which to-day, after the United States, occupies the second rank in the matter of cereal exports; and this is a significant event in the economic history of the nations, to which the attention of Europe should be directed. At the present moment the Argentine, with her 4 million tons of corn available for exportation, is not as yet mistress of the grain markets, but she represents, to those countries whose production is insufficient, a notable reserve, which has become indispensable since the United States, Canada, and Russia seem to have reached their limit of exportation.

The year 1907-8 was for the Argentine, thanks to the results of a good harvest, a period of exceptional prosperity. The average yield of wheat was 18·7 cwt. per hectare—14 bushels per acre—and in the Province of Buenos Ayres it amounted to over a ton per hectare—or 15 bushels per

acre—although the average was only 11 per acre in 1906-1907, and 13 in 1905-1906.

As for the prices, they ruled higher than any the country had so far known, even during its most prosperous periods. Wheat had been selling at 6 or 7 piastres the 100 kilos—that is, approximately, at 3s. to 3s. 6d. per bushel—and at that price agriculture still yielded a fair profit. In 1908, as a result of the bad harvests in several European countries, the sales rose to 6s.; at which price the profits on the cost of production amounted to 25 % or 30 %.

After this cursory glance at the present situation in the Argentine, we must also express our views of the future. Optimism is certainly permissible in the case of a country which has advanced so far in so short a time, and where prosperity is founded on a diversity of products which can never be affected by a universal crisis.

However, one well might wonder whether the Argentine might not, in the Biblical phrase, know lean years following the fat; whether she is not destined to suffer the onset of plagues, such as drought and the locust, which latter is to her, as to Egypt in the time of the Israelites, a veritable scourge. Certainly here we have one of the great risks to which the country is exposed: a country wherein all depends upon the harvest, the earth being the principal source of wealth, and the mother of all industry. Yet this danger, so real a few years ago, is greatly lessened to-day by the fact of the distribution of cultivated lands and pastures over a far greater area. A bad harvest could not compromise both agriculture and stock-raising over a stretch of more than 15° of latitude.

Yet the country is subject to a very real danger, but one of another kind. From the very exuberance of development may arise a crisis of growth; for her prosperity depends not only on plentiful harvests; it may be influenced by other factors on which it is far more difficult to pronounce.

The country must continue to require considerable sums of capital for her agricultural necessities, for her stock-raising, for commerce, and for industries; and it may be asked whether the European markets, from which, in great measure, her capital derives, can continue to afford her an ever-increas-

ing amount of assistance which will keep pace with her development in all directions.

The Argentine is not so far self-sufficing. The soil is, to be sure, a source of immense national wealth, but this wealth is not in the form of a reserve to be drawn on; it is, as a rule, converted into real estate directly it is produced; unless, indeed, it goes abroad. For a farmer who makes a profit, say, of £8000 or £10,000, will immediately employ his capital to acquire another holding or to start a different kind of culture, instead of clearing off the debts which already burden his property. He is contented with his position as a borrower; for if money, even on mortgage, costs him 8 to 9 per cent., he can, on the other hand, obtain a far higher interest by sinking it in the purchase of land.

From all this it results that in the Argentine rural and even urban property is largely hypothecated. It must be understood that this capital is well guaranteed, as its security rests not upon pure speculations but on the yield of the property, which is far in excess of the charges; however, since the general tendency is not towards redemption, one may wonder if, sooner or later, there may not be a lack of equilibrium between the impulse given to the country and its financial needs. The crisis which arose in the wool market in 1908, the drop in the prices of quebracho timber, and the restricted outlet for cattle on the hoof, and even for refrigerated meat,—all these partial misfortunes are salutary warnings, and we must not lose sight of them, nor allow ourselves to be hypnotised by the high prices of wheat, maize, or flax, or the heavy yield of the lucerne pastures.

For our part, in considering the future of the Republic no less than its present interests, we hope to see it enter upon a period of consolidation, rather than continue indefinitely the discussion of further progress. Before entering upon another stage of development the country must, for a while, mark time, in order to gain leisure to assume its own liabilities, rather than continue incessantly to absorb new capital.

But there is still a cloud in the serene skies of the Republic; a cloud that might be the precursor of a truly national catastrophe, if the measures necessary to avert it

were not taken in time. The peril arises neither from the economic situation, which is excellent, denoting an ever-increasing vitality, nor the relations of the Republic with the neighbouring nations, which are conceived in a spirit of peace and concord. Although a short-sighted diplomacy has attempted to envelop the relations between the Argentine and Brazil in an atmosphere of jealous distrust, there is no fundamental cause which might trouble the friendly relations of these two countries, which formerly fought side by side on the field of battle for the redemption of a sister nation. They have no conflicting economic interests which might divide them, and are destined to afford a great example of progress and of civilisation to the other States of South America.

The peril to which we refer is of a totally different character: it is caused exclusively by the exaggerated expenditure of the public administrations, and the dangerous paths of armed peace upon which the country has entered; thus implanting, in young and free America, a ruinous system, which is ruining the nations of the Old World, burdens them with insufferable taxes, and diverts from production and labour too large a proportion of citizens. In order to face imaginary dangers, Congress and the Government have lately decreed that a sum of £40,000,000 shall be expended upon armaments.

As for home politics, they form a domain which we do not desire to enter, and on which the world of affairs bestows little enough attention, so long as they do not compromise the public peace. The Argentine, in fact, is still under a system of personal power; the Presidency of the Republic is the focus about which all the political life of the country gravitates. In default of a people as conscious of its rights as of its duties, and possessed of the virtues necessary to a course of perseverance in democratic practices, it is the Government that manages the elections; and it is difficult to say whether it does so because there is no public opinion, or whether there is no public opinion because the Governments usurp the functions of the electorate. From this point of view there has been no change in the political *morale* of the country; the only progress to be noted is that the parties

resort less often than they used to violence as a solution of their quarrels.

As for the administrative expenses, they are increasing with a rapidity only equalled by the growth of the fiscal resources of this fortunate country. Proposals for public works accumulate in the various Ministries, while waiting for the funds necessary for their execution; their total amounts to-day to the respectable figure of nearly £40,000,000.

To sum up: from our re-examination of the Argentine situation for 1909, we obtain an impression of great progress and of actual prosperity, an impression confirmed by the statistics of foreign trade, in which the entire activity of the country is reflected. For the year 1907 the total of imports and exports amounted to £116,000,000; for 1908 the total receipts and outgoings represented £133,000,000: with a commercial balance of nearly £24,000,000 in favour of exports.

Among the other manifestations of national progress we have still to take into account the development of the network of railroads, of which 13,660 miles are in actual working, representing a capital of £158,000,000, while 3259 miles are projected or in process of construction, representing a capital of more than £25,000,000. These new lines have been conceded by Congress either to companies already existing, or to new companies which are able to offer all desirable guarantees, so as to assure the prompt realisation of the schemes accepted. The Government, on its own part, has solicited and obtained from Congress the necessary sanction for the execution of a vast plan for the colonisation of the Southern Territories, which is based on the construction of numerous railroads. This continuous extension of the railway system has greatly favoured the valorisation of the new Territories, and has contributed powerfully to the movement of colonisation and emigration which is the indispensable condition of a wider future.

To-day, then, all is for the best in the best, or at least the richest, country in the world. But if science teaches us that Nature takes no leaps—*natura non facit saltus*—history also teaches us that nations in their progress must not progress too rapidly. For this reason the Argentine

Republic, in especial, has need to-day to consolidate her prosperity under a *régime* of foreign and domestic peace, of prudence and economy, and to avoid speculation and the abuse of credit, which have ended, before now, in inevitable reaction.

PREFACE TO THE FIRST EDITION.

TWENTY years ago M. F. Latzina, Director of Statistics, published in French a very able work on the *Geographie de la République Argentine*, of which he had issued the first edition in Spanish, and I consented with pleasure to write an Introduction to a book whose object—an object which it fulfilled—was to familiarise European readers with a country whose rapid development is one of the most remarkable facts in the economic history of the nineteenth century.

“These results,” I wrote, after having quoted certain statistics of agriculture and commerce, “are assuredly very satisfactory. The Argentines have the right to be proud of them; few countries in the world could show a like example of progress!”

I have no less pleasure in associating myself to-day with this book, by Señor Albert B. Martinez (sometime Under-Secretary of State, and at present Director-General of the Statistical Department of the city of Buenos Ayres), and M. Maurice Lewandowski, Sub-Director of the Comptoir National d'Escompte of Paris. Their competence is incontestable, and their work requires no recommendation, since it has won the sanction of success, being now in its third French edition, and having been “crowned” by the French Academy. But the object which is aimed at by *The Argentine in the Nineteenth Century* is the same as that of the *Geographie de la République Argentine*, and the interest attaching to the book is the same.

“In the competition of the new nations, created by emigration from Europe,” I said in 1890, “this Republic will be enjoying a privileged situation, because of its particular advantages: the nature of its climate—a climate of the temperate zone; the vast extent of its territory; the quality of its soil; the facility with which railways can be built; its situation on the Atlantic coast, facing Europe, and rela-

tively near the Indian Ocean; the powerful tide of emigration setting in towards it, and the rapid peopling of the country, together with the wealth that results therefrom; the suitable character of its population, and the liberal spirit of its political institutions. . . .

"The Argentine Republic, which occupies in the temperate zone of South America a position analogous to that held by the United States in the corresponding portion of North America, may well dream, if not of equal power, at least of a similar future."

This dream is in process of realisation: of this the proof will be found in the chain of evidence which our authors put forward.

It is the present condition of affairs and, above all, the economic situation, which the authors of *The Argentine in the Twentieth Century* have set out to represent. They have not given us a panegyric—"nihil admirari," say they—but a practical book; one written by men of business and affairs, founded upon direct observation, and hard-and-fast figures, where statistics have provided them.

The Argentine is a young nation, which hitherto has busied itself rather in work and production for the amelioration of its present condition, and in the preparation of its morrow by creating capital, than in giving itself to the historical study of its past. Nevertheless, history is the web from which the spirit of a nation is woven. It is useful to recall the principal historical periods, and particularly the origins of the nation, for the better understanding of the present period.

It was in 1508 that the Spaniard, Juan Diaz de Solis, discovered the estuary of the Plata, the *Mar dulce*; and in 1516 he returned, thinking, after the discovery of the South Sea, by Nuñez de Balboa in 1513, that this might be the strait, so sought by the navigators of the time, by which that sea might be reached, but on landing he was killed by the arrows of the Charrua Indians. He had discovered no strait, but a spot assuredly well suited for colonial settlement. The first attempts were abortive: that of Sebastian Cabot, who built the fort of the Sancti-Spiritu (1527), and

that of Diego Garcia. It was then that the discovery of some ornaments of silver, worn by the people of the country, gave the river its name; known first as the Rio de Solis, it was now called the Rio de la Plata. The Indians destroyed the fort and killed the colonists.

Eight years later a wealthy private gentleman, an officer of Charles V., Don Pedro de Mendoza, undertook to establish a settlement at his own cost, on the condition of being appointed governor of all territories that might be found as far as 200 leagues from the ocean; and in 1535 he sailed with fourteen vessels and two thousand men. He laid the first foundations of the colony of Buenos Ayres, and he rebuilt the fort of the Sancti-Spiritu, while his lieutenant, Ayolas, in 1536, founded the station of Asuncion, on the Rio Paraguay. The post of Buenos Ayres was abandoned. After the death of Mendoza and Ayolas the new colony was governed by Martinez de Irala for a space of nearly twenty years; reinforced by fresh emigrants, it barely held its own against the losses inflicted upon it by the Indians. Irala, by a voyage of three years' duration, succeeded in putting himself in touch with the Spaniards of Peru.

Conquerors coming from Chili across the Andes, the Spaniards founded among others, despite the hostility of the Indians, the following stations: Santiago del Estero (1552), Mendoza (1560), Tucuman (1565), Cordoba (1573), Salta (1582), and Jujuy (1592). These at first were little more than camps entrenched. But Santiago del Estero was erected into a bishopric, and so remained until 1700, in which year the episcopal throne was transferred to Cordoba. In the eastern regions, in 1573, Governor Juan de Garay built Santa Fé, re-occupied Buenos Ayres, which was christened, on the 11th of June 1580, Cuidad de la Trinidad y Puerto de Santa Maria de Buenos Ayres (the City of the Trinity and the Haven of Holy Mary of the Fair Winds), and founded Corrientes in 1588.

Trade commenced. A first consignment of hides and sugar was dispatched to Spain in 1551; but the merchants of Seville protested, and as a result their privileges won the day. It is a fact that the monstrous regulations which Spain had imposed upon her colonies forced the Argentines, for

some considerable time to carry their exports across the continent to Callao, whence they were carried by sea to Panama; there they were again transported by land across the isthmus, and were shipped anew at Puerto Bello for Seville. Imports came by the same road.

There were, however, exceptions to this rule: either by grace of provisional permits given by the King of Spain, or, more frequently, through the contraband trade.

In 1617 the Province of Paraguay and the shores of the Plata were divided into three Provinces; Paraguay, Buenos Ayres (erected into a bishopric in 1630), and Tucuman, which were dependents of the viceroyalty of Peru. The captaincy of Chili also extended over both sides of the Andes. The Indians had to a great extent been divided among the colonists *en encomiendas*—that is to say, in a species of slavery; but other Indians, who were still free, were formidable enemies.

Early in the seventeenth century the Jesuits instituted their first “reductions” in Paraguay, and organised in a community the Guarano Indians of the country. These “reductions,” ravaged by the Mamelukes of Brazil, were replaced by missions established on either bank of the Paraguay River, and on the Uruguay to the south of Yguassu. The order of Jesuits was suppressed in 1766.

The principal towns of the Argentine of to-day were already established by the middle of the eighteenth century. At that period, so Savary informs us, “The city of Buenos Ayres contained about 4000 houses, all built of earth (adobe), but covered with tiles, with the exception of some fifty houses of brick. The inhabitants are rich, and owe their riches to the extensive trade which they carry on, both at home and abroad.” After the advent to the Spanish throne of the son-in-law of Louis XIV., France had the greater share of this trade; the King having conceded to a French company the monopoly of the *Assiente*—that is to say, of the trade in negroes, until by the Treaty of Utrecht France was forced to cede this monopoly to England.

The two principal articles of export were at that time green hides for Europe and the Paraguayan *maté* for Peru.

On the northern bank of the Plata the Portuguese had

founded the Colonia del Sacramento (1686), with a view to competing with the Spanish ports. The Spaniards seized this place once in 1724 and again in 1766; they founded Montevideo in 1726. The quarrel between the two colonies was only terminated by the Treaty of Madrid in 1750.

In 1748 Spain somewhat abated the severity of her laws. In 1776 she freed the Argentine from the overlordship of Peru, by creating the viceroyalty of La Plata, with Buenos Ayres as capital. The population, which before this change was only 37,000, rose to over 400,000 in a quarter of a century. In 1780 was founded the colony of Carmen, the first Patagonian settlement, the shores of Patagonia having been first explored by the Jesuit Quiroga in 1746.

During the wars of the Empire the English seized Buenos Ayres by surprise, but were expelled by a Frenchman, Jacques de Liniers, whom the inhabitants had appointed viceroy.

The *colonial period* ended in 1810.

Such were the origins of the Argentine; a time of difficulties and impediments; but in that period were laid the foundations on which the Argentine civilisation reposes.

The second period is that of the *formation of the Republican State*.

The first part of this period, that of the deliverance from Spain, opens with the memorable day of the 25th of May 1810, when liberty was peacefully proclaimed at Buenos Ayres. The revolution spread to Córdoba and to Tucuman it failed in Upper Peru, owing to the reverse of Goyenèche in 1811, and in Paraguay, where the capitulation of Tacuary took place in the same year. Belgrano, one of the heroes of the War of Independence, renewed the offensive and once more invaded Upper Peru—this time victoriously; but the Argentine troops were definitely driven from the country after the battles of Vilcupujio (1813), and Sipé-Sipe (1816). On the east coast the capitulation of Montevideo in 1814 put an end to the Spanish domination. On the west the brilliant expedition of General San Martin, who crossed the Andes, freed Chili, and struck the decisive blow by the capture of Lima (1817-1821). The victory of General Sucre at Ayacucho (1824) terminated the struggle. Argentine territory had already been seven years free from the Spanish troops.

The second part of this period, that of political construction, was longer, far more laborious, and still more bloody. Questions of race and party divided the inhabitants Guachos of the Pampa, Creoles * and pure Spaniards, Federals and Unitarians, disputed the power, while on the frontiers of the Republic the Indians continued to disturb and alarm the new State. Provinces seceded; many constitutions were drafted. In spite of his talent as a statesman, Rivadavia was unable to obtain the universal acceptance of the Unionist Constitution of 24th December 1826.

A war against Brazil, of which the notable fact was the victory of Ituzaingo (1827), resulted in the recognition of Uruguay as a free state.

The civil war broke out anew several times. The military leader of the Buenos Ayres Federals, General Rosas, seized upon the dictatorship in a time of disorder, exercising it not without intelligence, but with a cruel despotism, and he carried on a long war against Montevideo, which lasted until General Urquiza, of the Union party (with Brazil and Uruguay as allies) delivered his country by the victory of Caseros (1852). The Constitution of the Argentine Republic was voted on 25th May 1853; but the end of the civil war and the definite reunion of Buenos Ayres to the other Provinces did not take place until 1860, the year of the revision of the Constitution.

War and confusion are not usually propitious to progress. However, the population in 1861 was estimated approximately at 1,375,000; it had increased to almost five times what it was at the beginning of the century.

Buenos Ayres became definitely the capital of the Republic in 1882, upon ceasing to be the capital of the State of Buenos Ayres.

The third period is that of *economic development*. This is the period of which our authors write. We may mention it as beginning with the re-entrance of Buenos Ayres into the Argentine Concert, and the revision of the Constitution of October 1860. If it has not been free from political agitations and international misunderstandings, it has none

* This word is here used to denote mixed blood; in its proper use it denotes a person of Latin blood born in tropical or semi-tropical America.—[TRANS.]

the less been more pacific than the preceding periods, and industry has enjoyed a security which in former years was only too often disturbed by the regulations of colonial trade, the attacks of the Indians, the civil wars, and the Separatist policy. But there were still for twelve years intestine troubles and dissensions.

It was only in 1882 that the political organisation was completely constituted, when Buenos Ayres became the Federal capital; for from 1865 to 1870 the Argentine was forced to wage war against Paraguay, when it struggled, in concert with Brazil, against the despotism of Lopez. The Treaty of the 3rd of February 1876 gave it the greater Chaco as far as Pilcomayo. The Chaco is pacified; matters are not the same now as when, in 1881, Crevaux was assassinated there by the Tobas. General Riva effected the Argentine conquest of Patagonia (1879-1880), and the Indians, feared so long by the planters, were driven across the Andes.

In 1895 the difference which had arisen between the Argentine and Brazil, with reference to the Misiones frontier, was settled by arbitration. By the Treaty of 23rd July 1881 was terminated a long quarrel with Chili in relation to Patagonia; the Argentine obtained possession of the country as far as the line made by the Cordilleras and a portion of Tierra del Fuego. Arbitration also, in November 1902, settled the difference with Chili, no less irritating and of equally long standing, concerning, the frontiers of the Andes. No more serious causes of quarrel between the Argentine and its neighbours remain.

.

The period of *economic development* is as yet of only fifty years' duration: it is far from having reached the limit of its evolution; but we may judge of the amplitude which that evolution has already attained by means of statistics,* and by them we may foretell what the future holds in promise.

The population, estimated in 1861 as being 1,375,000, had by 1907 increased to 6,210,000. Immigration, varying from one period to another according to the economic condition of

* The more recent figures cited in this Preface are taken, for the most part, from *The Statesman's Year-Book*.

the European nations and the Argentine Republic, reached an annual average of 13,400 from 1860 to 1869 : between 1903 and 1908 it amounted to 211,000 (emigration not being deducted.)*

The area cultivated in 1895, the date of the first serious estimate, was 5,256,160 acres, of which 2,013,000 acres were under wheat; † in 1909 34·6 million acres were cultivated, of which 14·8 millions were in wheat. These 34·6 millions are only a small fraction of the 256 million acres which the Argentine appears to contain.

The grain harvest, estimated in 1878-1881 at barely 400,000 tons, exceeded a million tons in 1895, and in 1907-1908 amounted to 5,523,900 tons, or 204,384,000 bushels.

Although the bovine and ovine races have not greatly increased in numbers for the last twenty years, on account of the transformations effected by agriculture, ‡ the exportation of wool, which was 660,000 quintals in 1869-1870, was nearly 2,000,000 in 1905, and it still amounted to 1½ millions in 1907 ; the exportation of beef, reckoned in carcasses, was more than 66,000 head in 1900 and 463,000 in 1907.

The first section of railroad was constructed in 1857. In 1865 the Republic possessed only 154 miles of railroad ; in 1908 there were 14,643 miles.

In 1865, the first year of which we have commercial statistics, the foreign trade amounted to £11,300,000 ; in 1907, it reached £113,000,000, and in 1908 £127,600,000. For several years there has been a very large excess of exports over imports ; in 1908 it would seem to have exceeded £20,000,000.

These figures, to which our authors have added many others, are eloquent. They tell us that man, whose labour creates wealth, is four and a half times more numerous upon Argentine soil than he was forty-six years ago ; that immigration each year increases the number of workers ;

* This emigration amounted to an annual average of 93,000 between 1903-1907 ; but the deduction was not made in the years 1860-1869. In 1907 there were 209,000 immigrants and 90,000 emigrants.

† The cultivated area was estimated at 849,000 acres in 1872.

‡ In 1875 an approximate estimate gave 13½ millions of horned cattle and 57½ millions of sheep ; in 1907 the figures amounted to 25,844,000 and 77,580,000.

that cultivated soil, the chief instrument of wealth in an agricultural country, has an area nearly seven times greater than that of fourteen years ago; that wheat, the principal vegetable product of that soil, now yields harvests thirteen times more abundant than those of thirty years ago; that the products of stock-raising have, on the whole, greatly increased, despite the arrested development of certain forms of production; that the railways—the means of transport of man and his produce, which did not exist half a century since—now cover the land with a network of increasing fineness, and are placing the Argentine in the first rank of the nations in respect of the mileage of railroad per inhabitant; that foreign trade, which is one of the most characteristic forms of popular activity, and that commonly mentioned in illustrating a state's power of expansion, has multiplied itself ten times since 1865.

These figures, taken together, form a picture which is not only encouraging, but extremely flattering to the pride of the Argentine people.

But the picture is not without shadows. The Indians to-day amount only to thirty thousand in numbers; the Guachos are gradually disappearing before the agricultural settler; and the political and moral unity of the country is not yet fully accomplished. The Argentine, like most of the Latin-American republics, has given itself a Constitution based upon that of the United States; but the populations of its Provinces had not the spiritual cohesion exhibited by the British Colonies, and above all by New England, which qualities set the seal on religious faith and the love of liberty. European immigration has brought us composite elements which are not yet amalgamated. Nearly all immigrants have come to make money: the majority are indifferent to public affairs, as we see on election days. Others are only too inclined to attach themselves to coteries, to cliques. In the relations between the local governments and the central Government, the subordination of the former is more remarkable than the harmony of their mutual relations. The planters, intoxicated by their good fortune, are not always so prudent as to regulate their undertakings by their resources.

When in 1890 I wrote an Introduction to M. Latzina's book, the Argentine was in the full swing of speculation, and apparently saw no limits to its development. "The Argentines," I said, "resemble an enterprising merchant, who, having opened shop in a well-frequented street, and having borrowed money in order to start with a luxurious establishment, finds himself greatly embarrassed for years, although his business prospers, because his advances and his engagements are larger than his takings. It is desirable that this spirit of enterprise should be fed, so to speak, on diet, or at least, according to regimen; and on such conditions equilibrium would be re-established." Indeed, it then seemed that a crisis must occur; and it came, a few months later. It was very long and very severe; the Argentine learned what it meant to lose its credit, and for twelve years it suffered the disadvantages of a depreciated paper currency.

The country recovered, and speculation rapidly received fresh impetus. Thanks to the excess of exports, gold became plentiful; it is no longer at a premium; if interest—which has decreased—still maintains itself at about 6 per cent., it is because there is a great demand for capital. The budgets still increase at a pace to alarm a prudent financier, in spite of increased receipts. "If the Argentine does not wish to compromise its lofty destinies," say the authors of the present volume, "it is essential that it should maintain an economical administration, careful of the public moneys, yet open to all material progress. By so doing, it will inspire confidence in men and in capital: the two elements which it must still increase in order to become a great nation.

.

To the population born on Argentine soil were added, between 1857 and 1908, 3,338,000 immigrants of various nationality; * 1,706,000 Italians, 670,000 Spaniards, 201,000 French and Belgians, 100,000 Austro-Hungarians or Germans,

* On the other hand, 1,322,000 persons emigrated. The census of 1895 gave 886,000 foreigners not naturalised, of whom 493,000 were Italians, 199,000 Spaniards, 94,000 French, etc. To-day immigration consists especially of Italians (127,578 in 1906), Spaniards (79,287), Russians (17,434), Syrians (7677), Austrians (4277), French (3698), etc.

and 41,000 English. Thus the Latin races are greatly in the ascendant: a fact which facilitates assimilation.

The Government should preoccupy itself largely with this matter of assimilation: for the process is not complete. There are two effectual means which it might employ, among others, in order to assimilate its new recruits: ownership of the soil and education.

These two means have produced marvellous effects in the United States. The Homestead Law of the 20th of May 1862 gave to every American over twenty-one years of age, and to every person having declared, conformably with the law, his intention of becoming a citizen, the right to occupy gratuitously 160 acres of surveyed lands, or 80 acres only in districts more advantageously situated: if the holder, after five years of residence, has cultivated a portion of his holding, the full title is finally granted. For such purpose the public lands have been surveyed and divided into lots by the Government. The Government also sells public lands by auction or treaty. Up to the month of July 1905, it had thus alienated a total of 808,000,000 acres; which explains how millions of families—Irish, German, Scandinavian and others—have been more or less definitely settled on the soil of that which was already or which has since then become their native land. Here is an example the Argentine Government would do well to follow.

Education exercises an influence of another kind, which is no less efficacious. The Americans of the United States are well aware of this, and this is why they attach such importance to the upkeep of the "common schools" and the attendance of the pupils. The children of foreign parents become Americanised in class and during play by contact with young Americans. The English tongue becomes their own language; their manners of thought and their habits are modelled on those of their comrades, whom they are unconsciously proud to imitate. If the immigrant family does not forget the memories of its old home, at least its offspring, from the second generation, are rooted in the American soil and have American minds.

The Argentine Government must endeavour to obtain a

like result. For a long period primary instruction was in an extremely neglected state in the Argentine Republic. However, the Constitution obliged the Provinces to secure such instruction, the Federal Government to assist by finding a third of the expense of the first installation of the schools. But in spite of the Constitution, in 1874 there were only 1830 primary schools and 112,000 pupils. Progress has been accomplished: in 1905 there were 5250 schools, 14,118 teachers, male and female, and 544,000 pupils. But as the population between the ages of six and fourteen had increased to 827,000, only 65 per cent. of the children were attending school, and only one child in three was able to read and write. This is a state of things that must be changed.

Secondary education, as far as numbers go, is in no better case; there are sixteen "colleges," with 4100 pupils. The State Universities of Buenos Ayres and Córdoba and the three provincial Universities of La Plata, Santa Fé and Parana, with 3000 students, are relatively better.*

The three orders of instruction ought to work together to form a national spirit and a moral unity; but the Government should not forget that primary instruction is the basis, and that it is the only kind of instruction that can be bestowed upon each generation in its entirety, and that the children of each generation should be taught at an early age not only the ideas necessary to the life of the individual, but also, by means of the elements of national history, ethics, and applied science, the knowledge and love of their native country.

The Argentine Republic as yet counts few men to whom the exigencies of life leave leisure to consecrate themselves entirely to letters or the sciences. It has some distinguished writers, but they usually find a recompense for their talent in the public press; for in Buenos Ayres more than 200 journals are published. Men write as hurriedly as they act. It is to be hoped that before long, with the increase of wealth, there will arise men of science, who will find no lack of material in the country, and men of letters, historians, novelists, sociologists, etc., who will also never lack for matter in this

* The writer does not give the statistics of those who go abroad to study; the number is, of course, very considerable, especially of those who go to Paris.
—[TRANS.]

busy, humming hive. Such men are necessary, because their life-work goes far to make up the intellectual capital of a nation, and even to form nationality itself.

In my introduction to M. Latzina's book, I glanced at the whole continent of South America, and I remarked that civilisation had scarcely penetrated the interior of this vast continent; that the density of its population was extremely low; that the economic, intellectual and political life of the continent was concentrated, if I may so use the word, upon its periphery; that is to say, upon the shores which are in touch, through navigation, with the rest of the world; that the Argentine Republic formed the southern portion of this belt connecting Uruguay and Chili; that this belt is wider where the penetration of the interior is easier and the climate more favourable. This belt has also been widened in Southern Brazil by the construction of railroads. It is still wider in the Argentine, because the network of railways is more widely distributed, the soil is of even quality and cultivable, and the climate temperate and favourable to expansion.

For the purposes of this present Introduction, let us imagine a vaster area—the whole earth, or, at least, the three inhabited zones of the earth.

The torrid zone contains nearly a third of the land surface of the earth, and only a quarter of its population; the density of population is thus below the average. Original civilisations have existed in the torrid zone—for example, Mexico and Peru before the arrival of Europeans—but these existed on higher plateaus where the climate was not tropical. There were civilisations in India and the East Indies, but these were imported from the valley of the Ganges. There are to-day intertropical countries which exhibit an active economic life: India, Mexico, the Antilles and the seaboard of Brazil. Nevertheless, in the greater part of the torrid zone it would seem that the continuous high temperature saps human energy, and also renders it to a great extent unnecessary, by simplifying life, reducing as it does the number of man's essential needs by facilitating the satisfaction of those which are, like alimentation, strictly necessary.

The temperate zone of the north is the most favoured of all these. It contains nearly half the land surface of the globe. It is also the most populated, and the average density of population is far higher, for it contains about 1,207,000,000 inhabitants, or roughly speaking, three-quarters of the population of the globe. Here it is that we find massed the four great sources of the ancient and modern civilisation of the world, which also correspond to the four great groups of mankind; China with Japan; India, with the Deccan running down to the torrid zone; Europe, and the United States and Eastern Canada. In the three first centres the density of population is far greater than in any other large country. In the fourth, the number of human beings (some 94 millions) and the density are far less; but this centre has become one of the most important, by means of its activity of production.

There remains the temperate zone of the south. In this zone, the ocean occupies relatively the largest space. The land emerges from it only at the termination of three continents—America, Africa, and Australia, terminated by Tasmania and New Zealand. Before the arrival of Europeans, each of these divisions was absolutely isolated, without any relations with the others, and inhabited by races entirely savage. The coming of the Europeans who peopled them, and the maritime commerce which ensued, have awakened them to civilisation. In the case of America, we have seen that free colonisation was not commenced until the nineteenth century. In Africa, at the opening of the nineteenth century, there were only a few ports occupied, and Australia was still practically untouched. To-day, in the temperate zone of the south, which comprises only a twelfth part of the land surface of the globe, there are 24 millions of inhabitants, nearly all civilised and of European descent. This population amounts to 1·5 per cent. of that of the globe; its density, therefore, is below the average.

It is, however, the zone in which the population has relatively increased most rapidly since the beginning of the nineteenth century, for at the outset it certainly did not count a million inhabitants. The Australian and African divisions have owed their good fortune to gold, and in a

lesser degree to wool; but gold mines are a source of wealth which is exhausted by exploitation. In Australia, where the extent of arable lands is limited, immigration has at present practically ceased. In Africa the soil is little suited to culture, and immigration to the Transvaal has been recruited rather among Asiatic coolies than among free workers of European race.

In this southern temperate zone, the Argentine Republic is the State which has the most numerous population: that in which the population has known the greatest increase, and in which economic conditions promise the widest development in the near future. The perfecting of refrigerating processes will certainly facilitate the exportation of meats, and it is to be hoped that the interests of trade, under the necessities of the food supply of the labouring classes, will finally overcome the obstacles which the European producers oppose in the way of imports. The demand for wheat, like the demand for meat, may vary according to the year and the protective legislation of the nations; but in general we may say that it will increase rather than decrease, because the population of Europe, and especially of Central and Western Europe, is for ever increasing in numbers and in density, so that already it cannot suffice to itself by producing its alimentary needs from its own soil, and in proportion as it becomes wealthier it will consume more white bread and more butchers' meat. The United States and Canada continue to export wheat; but the rapid increase of the urban and industrial population of the United States will assuredly limit this exportation to a very great extent in the twentieth century.*

The Argentine Republic, where the harvest is due in January, so that its wheat arrives in the European markets by March, is the country destined to profit the most by these advantages. It must learn how to make use of them wisely, practising a policy of peace and concord, increasing its powers of stability by the development of the sentiment of nation-

* The consumption of wheat in the United States averaged 200 million bushels between 1871 and 1875, and 531 million between 1903 and 1907. The exportation averaged 62 million bushels between 1871 and 1875, and 122 million between 1903 and 1907.

ality, and by inspiring confidence both in foreign capitalists and in immigrants by accumulating capital of its own, and by learning to retain, in spite of success, the foresight which warns of perils and the prudence which avoids them.

E. LEVASSEUR,

*Member of the Institute,
Administrator of the College of France.*

INTRODUCTION

THIS book, intended to make known in Europe the present situation and the economic future of the Argentine Republic, comes at an opportune moment to fulfil its mission of popularisation.

During the last ten years of the nineteenth century the Argentine has suffered all the misfortunes and known all the disasters that can affect a rural and agricultural people. The locust, coming from the Tropics, devoured the crops; anthrax, imported from Europe, decimated the cattle; the threats of a war with Chili imposed enormous expenses and exhausted the national revenue; finally, a commercial and industrial crisis, and domestic disturbances, consequent upon the general misfortune, completed the tale of calamities which put the vitality of the nation to the test.

But as there is no night so long that it has no dawn, all these shadows fled away. Our quarrel with Chili was submitted to arbitration, and the decision of His Majesty the King of Great Britain not only terminated a cause of difference of fifteen years' duration, but re-established fraternal relations between the two Republics. The rural plagues were attacked and vanquished by measures which experience indicated as preventive of recurrence; commercial and industrial prosperity returned; the tranquillity of the interior was assured; and the general welfare increased. To accentuate still further this beneficent reaction, the immense and fertile plains of the pampa, open to the activities of the agriculturalists, began to produce abundant harvests, which struck the European markets with amazement, and diverted towards the Argentine a current of gold which was estimated at more than £20,000,000, and a stream of immigration, which, in the year 1904, brought 125,000 workers, and which promises to be even greater in the present year.

The Argentine Republic has issued triumphantly from its lengthy and severe ordeal; it has emerged richer, stronger

and more confident of its own destiny than at any other period of its history; and the increase of its revenues and the rapid growth of its prosperity have secured the attention of the great financial centres of Europe.

Public curiosity being thus awakened, many people have inquired: What is the Argentine? How far is the development of its wealth a sound and durable process? What is the probable future of its people? Is it a meteor that flashes brilliantly through space, or a star rising upon the economic and political horizon?

While some content themselves with asking such questions and awaiting their reply, M. Lewandowski, the representative of one of the greatest credit establishments in France, wished to gain some practical experience of the phenomenon. He took the most certain, most practical means; took steamer, crossed the ocean, and landed in the Argentine. With the learned collaboration of Señor Alberto Martinez, one of the most competent of men in matters of statistics and finance, he made a profound study of economic questions, and the present book is the outcome of their common observations.

This book should be read by all those who are not convinced that the word Europe sums up all humanity; but who take the pains, on the contrary, to follow the development of all other nations; understanding how necessary it is for the great nations to observe the progress and evolution of the younger peoples. Thus they avoid the risk of being surprised by the sudden apparition of great economic or political forces which they had not foreseen, or by which they had not known how to profit.

South America suffers from a prejudice that we cannot unhappily disclaim as being unjustified. The directing classes in France, as in all other European nations, with the exception of a small commercial and financial circle, seem to have been kept in intentional ignorance of all things relating to the nations of the new continent. The Argentine, Chili, Brazil, Venezuela, Ecuador,—countries separated one from another by enormous distances—are none the less, for the generality of Europeans, more or less one and the same thing; that is, they form a kind of a geographical nebulosity, which

is known as *South America*. The post-office employés of Buenos Ayres have often occasion to smile when they read the addresses inscribed on the envelopes of letters dispatched by the learned and scientific bodies of Europe, and Argentines residing abroad continually find food for reflection in the questions asked them by persons occupying the highest positions.

Yet for the old world there is every incentive to study more closely the development of these new peoples. It is enough to point out that the Argentine to-day occupies as significant a position as that held by the United States at the beginning of the nineteenth century; and that its continued evolution will undoubtedly, before the end of the present century, give it an importance equal to that of the United States at the present time.

In a conversation with Mr Roosevelt and his Secretary of State, Colonel John Hay, I had occasion to make this very remark, and the President replied, with the rapidity of judgment and the affirmative tone which are so characteristic of his mind: "In less time than that; you will find fifty years enough; for you will profit by all our experience and all the human progress effected during the nineteenth century."

The shadow of discredit which has hitherto lain upon South America is explained by the continual anarchy to which the majority of its peoples have lent themselves since the immense colonial empire of Spain threw off its fetters in the first quarter of the last century, in order to break up into fifteen separate republics. This anarchy and disorganisation, compared with the orderly spirit of progress which has reigned in the great republic of the North, have given rise to the belief, to-day general, that the so different destiny of these States was due to the special qualities and aptitudes of the Anglo-Saxon race, which the Latin races lacked.

This belief results from a superficial and incomplete examination of the facts, and has gained easy acceptance, even in works of a more or less scientific nature, such as *The Psychological Laws of the Evolution of Peoples*, in which the author cites, with regard to the Latin races and the peoples of South America, a number of inaccurate and

prejudiced facts, which have been gathered from the writings of a dyspeptic and ill-tempered journalist. Such data have caused M. Gustave Lebon to deduce psychological laws which are hardly favourable to the South American races.

If we wish to gain some idea of the true causes of this diversity of destiny between the peoples of North and South America, we must study the origin of each and the particular form which colonisation has assumed in each case; forms imposed by the force of historic facts rather than by the will of man.

The Anglo-Saxons arrived in the American coasts and founded, in the first half of the seventeenth century, such cities as Boston, Charleston, Philadelphia, etc., when America had already been discovered and explored by the Spaniards a century and a half before. These colonies were formed of groups of families who had abandoned their mother-country to seek a new one, where they could live and labour free from the persecutions of religious and political intolerance.

When these colonies attained a certain fame, the surplus of the overflowing populations of Europe was naturally attracted by these virgin and fertile lands, relatively near at hand though across the ocean. Thus there formed a current of immigration which rapidly peopled America and utilised the great natural resources of its enormous territory. In this way was gradually formed a new people, which was to a certain extent a development of the various nations from which it originated, and which preserved their customs and their political and social habits.

These colonists began by buying land of the native tribes; but, increasing in numbers and in strength, they found it more convenient to rob them, thus forcing the Red Indians to retreat towards the north and west; and for reasons of self-respect, or on account of religious principles, no deliberate attempt was made to mingle with the indigenous population.

This form of colonisation, whose prime cause was to be found in persecution, not in the execution of a preconceived plan, resulted in the existence, at the end of the eighteenth century, of thirteen colonies peopled exclusively by men of the white races, originally natives of the countries of Northern Europe, who had transported to this new soil their

manners and customs, their social and political laws, their liberal traditions and their economic system, so that from the moment they declared themselves independent, they were able immediately to form a single nation, united by all the ties which make for the cohesion of a people.*

To attain such progress, to reach the summit on which they rest to-day, the United States had only to persist in the same path, to follow the same groove, and the incontestable merit of this people and of its great statesmen is that they have been faithful to the principles of liberty and equality which they inherited from their ancestors, the venerable "conscript fathers"; principles which they ratified in the admirable Constitution whence this vast political organism has derived its cohesion, its vitality, and its strength.

How different were the origins of the peoples of Latin America! The Spanish sailors did not cross the ocean like the passengers of the *Mayflower*, or the companions of Penn, seeking solitary shores, known though distant, where they might establish a home, there to live and labour in peace and liberty.

The Spanish navigators, as brave as they were audacious, launched themselves into the unknown, guided only by their own genius, in order to discover a world, to conquer new lands, new subjects, for their country and their king; and in the pursuit of that heroic dream they performed exploits which to this day amaze us by their audacity.

These were the famous *conquistadores*, whom one of their descendants, José Maria Hérédia, has celebrated in the admirable lines:—

"As from the natal charnel-heap a flight
Of falcons: sick of purseless pride at home
By Murcian Palos pilots and captains come
With brutal and heroic dreams alight :

* The late Signor Pellegrini, in his anxiety to defend the Latin races, is not strictly impartial. At the time of the Declaration of Independence the population of the States was very largely English (with a substratum of Dutch in New York) but of different periods; and these different periods preserved their own traditions. The difference between the New England Quaker and the Kentucky trapper, or the Virginian fox-hunting squire, and the Dutch patroon or Highland crofter, was as great as any to be found among the Latin races, if not greater, and was largely a difference of arrested periods as well as a racial and a social difference. The result was that Federalism was accomplished peacefully only by the genius of Hamilton.—[TRANS.]

They seek the fabulous ore that comes to birth
 And ripens in Cipango's distant mines,
 And the trade-wind their long lateens inclines
 Toward the dim limits of the Western earth."

These first colonisers of Spanish America — soldiers, missionaries, officials, adventurers, men without family — seized upon a whole continent, which they discovered and conquered at the price of unheard-of exertions. They parcelled out the land, subjugated the native tribes, reducing them to servitude in their famous *encomiendas*, or putting into experimental practice, as in the Jesuit missions, theories of collectivism, which is to-day regarded as a modern invention. It was a true feudal system that arose in the new world.*

If, on the one hand, the native races were initiated into the doctrines of Catholicism in exchange for their liberty and independence, they did not, on the other hand, receive from their masters any political instruction, but preserved their habits of submission and passive obedience to their chief, which constituted their sole political tradition.

When, therefore, the day of emancipation arrived, and this enormous colony, in arms against its oppressors, declared itself independent, and divided itself into several Republics, the great mass of the population consisted of Indians converted to Christianity, and half-breeds, who preserved their habits unchanged and had no ideas, no traditions, other than that of government by individual might.

Only in the urban centres did the white race, with its conception of political institutions, predominate. And when the new Government wished to organise itself in an independent manner, the two tendencies and traditions, which correspond to two distinct mentalities, violently clashed, and began that long struggle, not wholly terminated even to-day, of which the history is the history of anarchism in America.

Another factor that also procured this conflict was the colonial political economy of Spain, which was not only

* It must be remembered, in comparing North with South America, that the former also had its period of extensive slavery, its plantations worked by convict labour, and for a period an almost feudal system.—[TRANS.]

a mistake, but a mistake of the period; an error which closed the whole continent to commerce, shut it away from the outer world, and maintained these masses of humanity in ignorance and isolation, in order to exploit them simply as a machine, or as an element of wealth for the service of their masters.

The problem which confronted the politicians of South America when they found themselves face to face with this new people, whom they must of necessity organise, was thus very different from, and far more difficult than the problem which the founders of the North American Union had to resolve.

These native masses obeyed with all their might and with the utmost enthusiasm so long as it was a question of fighting against the foreign troops and of winning their independence; but, victory once assured, guided by their leaders, the *caudillos*, most of whom were white, they revolted against the tendencies which began to show themselves among the Europeans of the cities, and in many places succeeded in dominating over them by force of numbers, thus preventing all political and administrative progress, and maintaining, as their form of government, the personal, arbitrary, and irresponsible power of a leader, that is, of the *caudillo*.

The written Constitutions which these people had established upon declaring their independence, and which were inspired by the Constitutions of the United States or the Swiss Republic, were thus reduced to a dead letter, as they were in complete contradiction to the political habits of the mass of the populace, and required, for their application, a political education which the peoples of South America did not possess. A whole century had to elapse before immigration, material interest, and the influence of civilisation, were able slowly to modify the political mentality of these peoples, by reinforcing and popularising the principles of government, extirpating the elements and suppressing the causes of the anarchy which had so long disturbed them.

Among the nations which experienced these beneficent influences, the Spanish colony known as the *Viceroyalty of the Rio de la Plata*, to-day the Argentine Republic, was

quite specially favoured. Its territory, composed of immense prairies, the celebrated Argentine "pampas," stretching from the sea-coast and the river littoral, offered the unique wealth of their fertility and their climate. There were no mines of gold or silver to arouse the greed of adventurers; they came to these regions only to traverse them, and so to proceed immediately to the gold-bearing regions of the distant Cordilleras.

Moreover, the first colonists who established themselves on the banks of the Plata, repulsed and expelled by the natives, were forced to abandon a certain number of cattle and horses, which found in these prairies an admirable opportunity to live and multiply in freedom, until finally they formed the immense herds of wild cattle and horses, whose hides became the principal wealth and the chief article of commerce of these regions.

Although the Rio de la Plata had no commercial relations with the outside world, and was only able to trade with Cadiz, the immensity and the solitude of its shores favoured a contraband trade; to such a degree that English, Dutch, and Portuguese smugglers came from all parts to exchange their manufactured articles for the hides of these wild herds.—This it is that explains how Buenos Ayres was able from the outset to become a great commercial centre, in which the trades dependent upon stock-raising quickly occupied the first place.

Commercial activity, the development of communication by sea, the fertility of the soil, the climate—all contributed from the early days of emancipation to attract European immigration. This immigration, like that which peopled the America of the north, was composed of families who came to settle, to form new homes, to labour. These families, following the example of their predecessors in the United States and for the same causes, did not mingle with the native tribes, but struggled against them, and forced them to abandon their lands and fly to the south, until at last, after a long and cruel struggle, they almost completely disappeared.

This immigration increased year by year, and to-day the great majority of the population of the Argentine Republic—a population now exceeding 5 millions—is of European origin.

That this immigration, which flows from all the nations of Europe, has been the chief agent of the present prosperity of the Argentine, and is the condition of its future greatness, is an incontestable fact. One of our leading statesmen has declared, of America, that "to govern is to people"; and this aphorism has remained a fundamental principle of government. To recognise the full force of this assertion, we must reflect that these unusually fertile prairies, situated in a privileged climate, near the sea-coast or on the banks of enormous rivers, navigable even by transatlantic steamers, need nothing but human labour to transform them, with less effort and at less expense than anywhere else in the world, into immense fields of wheat or maize, or pastures of lucerne, covered with herds, able to produce bread and meat enough to feed all Europe.

Accordingly the agricultural production of the Argentine Republic is limited only by the number of hands which lend themselves to its exploitation; in which we have a repetition of the very phenomenon which has served as the foundation of the development of the United States.

Under these conditions the progress of the Argentine Republic is a necessary and inevitable fact, which extraordinary circumstances might for a time retard, but which nothing could finally arrest; except, indeed, one could restrain the daily exodus of fresh swarms from the human hive, which abandon the old soils, exhausted by production, to seek out the fertile, virgin, and unpeopled areas of the globe.

Hitherto this exodus has been directed principally to the United States; attracted thither by a host of special and favouring circumstances. But the time is rapidly approaching when North America in turn will find herself populated to the saturation point, and will no longer be able to receive the hosts which benefited her formerly. The laws of the United States are already beginning to impose conditions upon immigration which are constantly becoming more severe; and these laws are imposed by the two great political forces—the superior social classes and the lower classes of the people.

The upper classes, Anglo-Saxon in origin, fear that contemporary immigration, coming as it does from peoples of alien race, from the south or east of Europe, may modify or

enfeeble those great moral and political qualities to which they attribute the greatness and prosperity of their nation. On the other hand, the federated workers see in these new arrivals, healthy and vigorous, but having fewer needs, a source of dangerous competition, which may have a disastrous influence on conditions of labour and payment.

The stream of irrigation which is now setting in towards the United States, and which amounted in numbers to 800,000 in the year 1904, must necessarily therefore, as time goes on, turn aside in other directions, and as it will nowhere meet with more advantageous circumstances than in the Argentine, it will flow thither as it flows already, but in greater and greater numbers, resulting in a development of wealth and power superior to any hitherto known.

Some persons, however, formulate certain reservations as to the consistency and the political and social value of nations formed by these human inundations, composed as they are of men of different races, having neither the same language, nor the same religion, nor the same customs; they doubt whether this new Babel can give birth to a national spirit sufficiently vigorous to impress a character of political and moral unity upon these new recruits.

In order to prove that these fears are ill-founded, we have only to take the practical example furnished by the United States. Into this vast national crucible there poured, from the outset, the stream of emigration from Great Britain, Holland, France, and Spain; later came Scandinavians, Germans, Lithuanians, Poles, Hungarians, Italians, Syrians and Arabs. From the fusion of all these elements has issued a new race, homogeneous and powerful, with a strong national spirit which is known as "the American spirit," and under that name has won the respect of the world. This result is neither accidental nor due to special antecedents; it is the consequence of a natural evolution, ably and intelligently directed.

The European law, which attributes to the son the nationality of his father, may have had its justification in the past; to-day it is maintained only by force of tradition.

Nationality and love of country are only an extension of the love of the family and the home; and these sentiments

cannot, any more than others, be forced upon one by law. There can exist for a man only the home and the family in which he was born and bred. Doubtless he will feel himself attached to the home of his forbears by ties of sentiment and respect; but all the roots of his intimate feelings bind him to the home and the family into which he was born; they are in his blood, and thence he has received the first impressions which mould his character and imprint those characteristics which form his personality.

It is the same with nationality and the mother-country. It is useless to attempt to persuade either child or man that his country is not that in which he was born, in which he has grown up, but another distant country which he has neither known nor seen.

The difference of origin among the children of immigrants of different nationalities disappears in childhood, through the community of life in school and workshop; through sharing alike in work and play; and it is in the earlier years of life that the mind is moulded by its surroundings; in these years develops that feeling of attachment to the soil, of union, solidarity, and common memories, that shows itself later in an ardent patriotism. Unity of language necessarily favours the process of fusion, and explains the fact that the descendants of immigrants of different race, religion, language, habits and traditions, are able to fuse so completely as to form a perfectly homogeneous population, one in mind and in sentiment, thus constituting a new nationality, young, vigorous and strongly individual.

We have thus under our eyes a practical example of the unity of the human race. The hazards of life, in the course of centuries, having dispersed the primitive race throughout the earth, it has formed, under the influence of circumstances, new types, which in the course of time have met and mingled, to form new crosses in their turn, which as a matter of fact are only the modalities of a common primitive race.

The same phenomenon is being repeated in the Argentine, as in all the American republics, and the spontaneous and vital sentiment of nationality continually strikes the observer, who notes the pride with which a child born in Argentina, whether he be the son of a Spaniard, Frenchman,

Italian, or German, affirms, when questioned, that his country is the Argentine.

Thus this Republic possesses all the requisite conditions of becoming, with the passage of time, one of the greatest nations of the earth. Its territory is immense and fertile, its surface being equal to that of all Europe, excepting Russia; it is capable of supporting with care at least 100 millions of human beings; almost every climate is to be found within its limits, and, consequently, it can yield all products, from those of the tropics to those of the polar regions. Its rivers and its mountains are among the greatest of the globe. As its maritime frontier it has the Atlantic, which brings it into contact with the whole world.

It is governed by institutions more liberal than those of any other nation, especially in all that affects the foreigner; it regards the influx of immigration with approval, and seeks to promote it. In proportion as its vast vacant spaces become peopled their value is increased tenfold, and production grows at an enormous pace; for a single family, by the aid of modern machinery, can exploit a larger area of soil, yielding a produce far greater than is required for its own consumption; a fact which explains the surprising rate at which the export trade has increased.

Such are the true causes of the prosperity of this country, as is proved, with abundant detail, by MM. Martinez and Lewandowski; and as these causes are not accidental, but fundamental and permanent, they should produce in South America the same results as in the North.

Granted that wealth and prosperity are essentially conservative elements, we have here a serious guarantee of political stability; the more so as the country has already passed the difficult age and is cured of the malady endemic to South America—anarchy.

It is also to be hoped that our Argentine politicians, taught by experience, and comprehending all the responsibilities imposed upon them by their noble mission—the work of racial regeneration and the betterment of South America—will succeed in making constitutional government an actual fact, by restraining and uprooting the tendency to personal power, which is the lamentable heritage of indigenous tradition.

It is a great nation that is rising on the brink of the twentieth century; the mistress of an enormous inheritance. Immigration and the increase of the birth-rate are furnishing it with the arms it requires; it lacks only those reserves of capital which, like all new peoples, it has not as yet had time to create.

In no country can European capital find a more fertile or advantageous field for its operations: a fact already well known in England; and one the authors of this book have wished to emphasise for the greater benefit of French capital. In this they serve the interests of France and, still more particularly, those of the Argentine Republic; and in the name of my own compatriots, as well as for myself, I take this opportunity of expressing my sincere gratitude.

C. PELLEGRINI.

THE ARGENTINE IN THE 20TH CENTURY

GENERAL PLAN AND METHOD OF THIS BOOK.

BEFORE commencing a study of the financial and economic situation in the Argentine Republic, it is important to decide at the outset as to the spirit in which this examination should be pursued, and the method most proper to such an inquiry. We tread upon a novel and peculiar field, and any too rigid comparison with the events of other countries might easily lead us to errors of appreciation.

Above all we must practise the philosophical principle *nil admirari*; we must be astonished at nothing, and abstain from all too absolute judgments. Although, as the figures of foreign trade will show, the progress of the country has surpassed all expectation, it is, on the other hand, almost impossible to foretell how far the results of one year will be ratified by the year following.

Like all young nations, the Argentine progresses on its path to the unknown by leaps and bounds; it is as yet in an unstable condition, in which the oscillations of prosperity are still of great amplitude and exceedingly sudden.

It is easy to discern the cause of this essentially unstable condition.

The Argentine, in its present phase, is an agricultural country, whose principal sources of wealth are cereals and stock-raising; the result is that each year the whole life of the country is affected by the harvest.* On the harvest depends, in a great degree, the movements of external commerce; it produces those sudden changes which occur

* We use the word harvest here in its widest sense, but we must ultimately distinguish the results of stock-raising from those of agriculture, since they do not necessarily vary in the same direction.

from year to year, and which result occasionally in a variation of £8,000,000 to £12,000,000 above or below the average.

The harvest influences not only the exports, more than half of which consist of agricultural products, but has no less an influence on the value of importations.*

The national powers of consumption are, in fact, very intimately connected with the measure of the agricultural output; as the latter is bad or good, the home consumption absorbs more or fewer imported products. Thus the poor harvests of 1901 and 1902, which resulted in a fall of nearly £1,800,000 in the cereal exports, produced in 1902 a fall of £800,000 in the imports of iron and materials used for construction. The same depression was visible in the imports of textiles and beverages, and still more so in those of articles *de luxe*. The spending powers of the country being closely dependent on the facility of realising the products of the soil, it is easy to understand that in the case of a bad harvest or a poor market the consumers have no longer the same powers of purchase.

We find the same ups and downs in the figures of the Budget, the contributive powers of the country being influenced by the same causes as its consumption. If the crops are poor, the Budget of the following year shows immediate traces of the fact. Thus in 1902, the year of the bad harvest, the total receipts were estimated at £5,534,000 in paper, and £9,486,669 in gold; but the actual receipts were only £5,221,000 in paper, and £8,047,755 in gold; a deficit of £1,438,913 in gold.

At the same time the Customs receipts, which are the most variable item of the revenue, on account of their direct relation to consumption, have fallen from one year to another (as in 1903 compared with 1902), as much as £1,200,000 in consequence of the agricultural crisis.

There is an equally direct relation between the financial situation and the results of the harvest. If the commercial balance is favourable, the Argentine becomes a creditor of foreign countries by the excess of its exportations, and the

* The value of the exports in 1907 was £59,240,874, and according to the official figures the products of agriculture amounted to £32,818,324

resulting payments in gold, after the deductions of the interest on the foreign debt, increase the proportion between the metallic currency and the monetary circulation in general.

As these few examples prove, the prosperity of the country is subordinated to the result of the harvest; the latter gives the measure of all improvement, all progress of a financial and economic order. Unlike the ancient European nations, the Argentine Republic has no reserves of accumulated capital behind it, so that it can live on its own savings in times of crisis. Its commerce and its industries depend almost exclusively upon its agricultural yield, and share all the latter's vicissitudes.

All depends on the value of the soil, the basis of public and private wealth. The power of expenditure which follows a good harvest may contribute towards proving personal property, but the latter remains always strictly related to the agricultural yield and general produce of the soil, and does not constitute an easily-realised reserve.

For the rest, we must recognise that, as a rule, this capital does not remain inactive, and is as little as possible sterilised by investment in the public funds. Those who possess available cash, in the shape of revenue from a large estate, usually employ it by increasing their stock of cattle, or in reclaiming more land, or by investing it in other estates; so that all that comes from the earth returns to the earth, and goes to increase its yield.

The peculiar situation of this great agricultural country, which constitutes at once the strength and the instability of the Republic, shows us in what spirit and by what method it should be studied. All depends upon the yield of the soil, for this is the great dispenser of the national wealth; it is therefore the agricultural system that we must examine first of all, if we wish to arrive at a solution of the problems arising from the present condition of the Argentine or predict its future.

To follow out this general plan, we must consider the country first of all from two standpoints: we must examine into its production and its markets or outlets, in order to learn the true conditions of its existence, the value of its soil, and its sources of revenue.

We shall then proceed to examine its administrative machinery, showing how the Argentine lives and progresses as a nation, and to analyse its financial and monetary organisation with reference to the economic situation.

The two portions of this scheme are closely connected, and their study must lead us to the same conclusion, that the Argentine is a nation in a state of growth, and, like all young nations, still uncertain of its first steps; but it is animated by a spirit of initiative, and urged by the breath of progress, which may lead it to a high destiny among the great productive countries of the earth.

THE ARGENTINE NATIONALITY.*

Is there an Argentine nationality, and what is its significance in respect of the territory it occupies?—The formation of this nationality.

An examination of the qualities of the Argentine people.—Sense of progress; remarkable faculty of assimilation: character essentially practical.—The fusion of the Latin genius with Anglo-Saxon energy.

The contrast between the political world, with its instability and lack of organisation, and the economic world, which manifests intense vitality and national progress.—The necessity of developing the national idea, and of raising it above material questions.—The slow elaboration of a new race born of the various elements of immigration.

TO present a complete picture of the Argentine, it is not enough to describe its configuration, its great rivers, its climate, its population, its forms of agriculture, and the value of its soil; all this is a dead letter, and will by no means yield us the secret of the country's future, unless we first resolve one question of a sociological character: Is there an Argentine nationality, and what does it signify in respect of the territory which it occupies? Could one, for instance, estimate the importance of the United States merely from the point of view of their agricultural and mineral wealth, without taking into account the work and the character of the admirable Anglo-Saxon race, which has adapted itself to American soil, and has succeeded in obtaining from it its full value?

* We must here explain that the Argentine possesses two currencies: the piastre or dollar, whose value is 5 francs, and the paper piastre, which by the law of conversion is equivalent to 2 francs 20, or 1s. 7·2d.

As for weights and measures, the decimal metric system has been adopted. In surveying large areas, the square league is occasionally employed as unit, which contains 2500 hectares, or 5628 acres = about $9\frac{1}{2}$ square miles.

We should also explain that the Argentine Republic, of which the Federal capital is Buenos Ayres, is divided into fourteen autonomous Provinces and ten national Territories. The Provinces, in the order of population, are as follows: Buenos Ayres, Santa Fé, Córdoba, Entre Rios, Corrientès, Tucuman, Santiago de l'Estero, Mendoza, Salta, Catamarca, San Juan, San Luis, La Rioja, and Jujuy.

The national Territories are: La Pampa, Misionès, Nequen, Rio Negro, Chaco, Formosa, Chubut, Santa Cruz, the Andes, and Tierra del Fuego

And could we explain the fact that certain countries of South America, which also, thanks to their natural wealth, have all the elements of rapid development, have remained stationary, and hardly count as nations, if the question of race did not throw light on the mystery, showing us that with the most favourable factors of the soil, a ferment is essential to start the growth of the seed?

Concerning the Argentine, this then is the problem which we have to consider, if we wish to see further than the present moment, and to judge in what measure its progress may be consolidated and even accelerated. In other terms, we must understand whether the Argentine must depend upon a fortuitous grouping of individuals brought together by the various streams of immigration, and having no common tie but the desire to enrich themselves, or whether these various elements are destined to become fused, and in time to form a true nationality, with its own traditions, its own ideal.

This latter is naturally the end to be pursued by the Argentine Government, if it wishes to prepare for the future by making moral and material progress go hand in hand. Its *role* is not to manage the country like a directing syndicate, but to direct all individual efforts, all initiative, and all other available forces, to the same national and patriotic end.

It was this idea that a President of the Republic, Señor Quintana, felt it his duty to enunciate, when, upon assuming the Presidential authority, he stated, in his inaugural message: "I am the head of a nation which has in America an ideal"; and he added: "There is one common characteristic among us that was discovered as early as the colonial period, in the magnitude of plans of campaign, in the clamour of intestine conflict, in the government of the constitutional period; it is, that we all bear in our hearts the sense of our future greatness."

How far can these aspirations be translated into facts? That is a question we must examine seriously and with an absolutely unbiassed judgment.

We cannot study this question of the Argentine nationality in books; for a country which has been so rapidly carried away on the tide of material progress has but

little time to examine itself. Neither has it been able to form a literature or a sociology which might reflect the dominant characteristics of the generation; it is only by an inquiry and an analysis of the facts that we can isolate this element of nationality from the various foreign elements which have contributed to its formation.

One factor that facilitates our task is the clear-sightedness of the Argentines themselves, who are the first to recognise, with abundant good-temper, their own shortcomings. They are almost exaggerated in their self-criticisms when depicting themselves; and our work has been cut out for us in avoiding too hasty generalisations and in softening certain too rigorous judgments, although these emanated from men who were certainly in a position to understand the tendencies of their generation.

One principle dominates the whole question: it is that which a contemporary historian expresses in these terms: "When peoples come into contact they begin by an exchange of their faults." Such an observation might well apply to a people like the Argentines, who are not yet settled on their own foundations, and are constantly increased by immigration.

All the varieties of the Latin race have contributed to form this people: Spain and Italy have made the largest contributions, and France has also in her time contributed her share. The Argentine has even assimilated a Basque population, of especial interest on account of its aptitude for agricultural work, and its adaptability to its new surroundings.

Finally, the Anglo-Saxons have also entered the Argentine, to mingle with the Latin element, and have given great assistance in opening up the country, by setting an influential example of initiative, progress, and energy. This penetration of the Latin race, a little indolent and inactive as it is, by the energetic and progressive Anglo-Saxons, enables us the better to understand the good and bad qualities of the Argentine nationality.

In short, if we are to obtain an unbiassed view of the national physiognomy of this adolescent people, we must remember that its good qualities, like its faults, are the

result of the commingling of the varied elements which have entered the country by immigration; elements that have mixed and reacted upon each other, so that their dominant characteristics have finally appeared in the Argentine character.

There is one gift which we cannot deny this people: intelligence, joined to a remarkable power of assimilation. It also has that gift of enterprise, that sense of progress, which are found in the Anglo-Saxon races, and which have found such magnificent scope in the United States.

A young nation, without a past, the Argentine is not impeded, like most of the Latin nations, by a load of custom, prejudice, and routine, hampering its motions and impeding its progress. Profiting by the experience of others, it knows how to adapt itself to the best; taking its good wherever it finds it. It creates nothing, invents nothing, but appropriates all new ideas, which find upon its soil the conditions favourable to a rapid expansion. It is, indeed, formed after the likeness of its own soil, which produces without effort and lends itself admirably to every kind of culture.

This sense of progress is certainly the most characteristic trait of the Argentine, and the one by which it is distinguished among the other Latin nations of South America. Uruguay, for example, which possesses a soil as rich, and offers the same facility of transport, has given no proofs of initiative and vitality to lead one to hope that she has really entered upon the path of progress. It is the same with Paraguay and many other States, which have not succeeded in accomplishing any of the changes demanded by modern civilisation.

The Argentine, on the contrary, has always known how to derive benefit from whatever source was available, thanks to the current of immigration which keeps it in permanent touch with foreign countries. It has also assimilated the inventions and the methods of more civilised nations, and has attracted men capable of applying them. At the head of the great administrations of the State, one often finds specialists from Europe or the United States, who bring the fruits of their experience, and increase the intellectual possessions of the nation. The departments of railroads,

navigation, public works, and hygiene, thanks to these happy selections, offer every security of efficiency in operation.

One may say, it is true, that this is the result of foreign influence ; but what does the origin of all these improvements signify in respect of the future, so long as they become incorporated in the life of the Argentine and contribute to its evolution ? One thing which proves that the instinct for progress is at the heart of the national temperament is that it is found in the lower strata of certain public services in which the foreign element plays no part. The administration of the police, for instance, and that of the posts and telegraphs, to cite no other examples, are conducted with as great a regularity as in any European country.

Thus, while allowing that the initiative of all improvements comes from abroad, we must not overlook the fact that the Argentine has assimilated them with the utmost facility, and that this gift of assimilation forms to-day a valuable portion of the national patrimony.

Despite its eminently cosmopolitan character, which is a peculiarity of its development, the Argentine Republic has succeeded in retaining its own personality among so many diverse elements. It is the type of the modern nation, whose ideal is that of the United States—*business*. A man is *zozzo* or *vivo*—a fool or more than capable—there is no medium.

From this point of view the Argentine is at the apex of its period ; it has no use for abstract ideas or immortal principles ; its ambition being above all to sell its corn and cattle and to enrich itself. Behind the agitation of the political parties there is no other object than this : to share in the exploitation of the country and to enjoy its wealth. The heroic period is over for the Argentine ; its independence is to-day definitely assured ; it pursues no dreams of conquest now, but seeks only pacific victories for its products in the great international markets.

Prosaic as the present generation is, it is not, from our point of view, completely without nobility ; it loves its native soil and glorifies it ; not, assuredly, after the fashion of Virgil saluting the Latin soil, fertile of heroes, but as a land productive of rich harvests, and the source of material prosperity.

This it is that explains the powerful attraction which the Argentine exercises upon all those who have trodden its soil. The country progresses with such rapidity, the value of the soil increases in such proportions, that the most indifferent end by being drawn into the stream. Those who come to live here without any idea of final residence make up their minds to settle as soon as they hold the smallest parcel of property. When a man has lived some little time in the Argentine, and has watched the spectacle of its rapid development, he is quickly seized by the business vitality which forces him to take part in the great movement.

This love of the Argentine for his land may certainly have its noble side, but he knows nothing of the moving spirit of poetry which clothes that love in the old countries of Europe, where man becomes attached not only to the cultivable land, but to all the memories of the native village; the familiar hills and meadows, the old church, and all that puts us into communication with the soul of places. It would seem as though one holds more closely to the earth that demands the most labour, the greatest efforts, even the greatest disappointments.

No one was ever more attached to the land than the Boer, who lived at peace in an ungrateful soil, indifferent to the mineral wealth which it might conceal. It was this land, where he lived an independent life, that he defended so stubbornly; not the gold, which was yet the true wealth of the country.

The Argentine also has seen pass over its soil the same rude generation, having no other dream than independence. The "guacho" of old, a mixed type of the Indian and Spanish races, the true son of the pampa, was truly attached to the immense plain upon which he lived at the call of caprice, a wild rider in every sense. To-day the type tends to disappear, as civilisation, and more especially administration, everywhere make their influence felt; as the ancient virgin pampa is transformed into cultivable soil, bristling on all hands with barbed wire. As he was not easy to domesticate, nor break in to any continuous labour, the "guacho" has been supplanted little by little by the foreign farmer, the colonist; and to-day he is almost submerged by

the wave of immigration which has invaded the country, and which forms now the major part of the population.

From the men of this new generation one must ask no other love for the soil than that which is born of the profits they draw from it. They can move indifferently from north to south, from east to west; the soil for them is everywhere the same, provided the harvest be good. But, apart from that, they nevertheless love this land of promise, and interest makes them its children.

From this generation, whose principal traits we have noted, it seems that we may in the future expect great things.

To be sure, if the world were to return to its old ideal, that of glory or imperialism, we hardly know what place the Argentine would find in the scheme of things. It is unsuited to a military policy; it has no ambition to measure itself with neighbouring nations, which are far more eager for adventure.

But if we stand on the economic plane, the only one which interests us, we must allow that this generation is well armed for self-defence in every field of the commercial struggle. From the fusion of the Latin genius with the Anglo-Saxon energy has issued a new product, extremely capable in business, full of practical sense, and very open to progress, which will be fully able to hold its own in a century in which money is the great instrument of domination. This race, formed haphazard of immigration, is yet the very race for Argentine soil; between the two there is a correspondence, an adaptation, as perfect as if it were the result of long-continued design.

To sum up: the Argentine nationality appears to a foreigner under two distinct aspects; there is its political side, characterised by instability and lack of organisation, and the economic side, in which an intense national life and progress are manifested. Will this truly abnormal situation, containing both very bad and very good elements, perhaps, terminate favourably, making of the Argentine people not merely a rich, but also a great nation? Will the development of public affairs, left so far to the hazard of politics, even reach the plane of our economic development? Will the Argentine nation eliminate, under the pressure of material

progress, the leaven of anarchy left behind by a century of civil dissension? This is the secret of the future; this is the great achievement which remains to be accomplished in order to consolidate the present prosperity of the country.

In short, we must not lose sight of the fact that this prosperity has hitherto been less the work of man than of nature, which has been prodigal of her gifts to this fortunate land. This is a thought which has been expressed in a speech in the Argentine Senate, in which Senator Uriburu shows that Providence is always coming to the rescue by repairing the fault of the State.

"It is Providence," he says, "which so opportunely sends us the rains to water our lands and to raise our marvellous crops; it is Providence that has given us the greatest Minister of Finance we have ever known, our fertile soil and our clear sky; the supreme Minister who looks after all our needs, who saves us from all difficulties, and who, despite our errors, continues to ensure the greatness of the Republic. Let man appropriate his work, but let him render unto Cæsar that which is Cæsar's."

And now if by some impossibility the situation were to change: if in spite of the enormous extension of cultivated lands a period of bad harvests were to follow the present period of fat cattle: would there not be reason to fear that the whole national edifice, founded as it is on prosperity, might become disintegrated, and crumble under the stroke of adversity? This is the peril we must indeed seek to avoid; it is for this reason that the intervention of a strong power seems necessary, in order to restrain the germs of evil brought by so many races, and to prevent the Argentine from falling back into the state of anarchy and revolution which for her is only a distant memory.

Taking even a more elevated standpoint, we may add that in order to amalgamate all the elements of immigration and to attach them to the country, through good and evil fortune, we need another solvent than personal interest or profit. To create a people it may suffice to give it a body, but to make it live it must also be given a soul, at whose breath the collectivity of individuals will be transformed into that moral unity which we call the nation. This is

a question of prime importance in a country such as the Argentine, where the struggle for existence has taken a particularly keen form, which scarcely favours the development of disinterested sentiments.

It is for the State to develop among its people this national idea, and to turn all individual efforts to its profit. Its duty is to raise its authority above the medley of interest, to restrain ambition within a just limit by the influence of moral and patriotic ideas, and so to ensure the reign of justice and social peace, without which national prosperity will never be more than ephemeral.

In imagining, from this aspect, the formation of a nationality, we have no intention of criticising the country; still less do we deny the process of evolution which has gradually transformed its organisation. A nation is not created in a day, especially when it is a question of a country so young as the Argentine, which in less than a century has issued from the struggle for independence, and even to-day has hardly rid itself of the revolutionary spirit.

For a nation to become self-conscious, centuries must pass; traditions must be formed, and the great moral or intellectual forces of humanity—religion, science, literature, even poetry—must develop the sense of a collective life other than the life of business. And hitherto the Argentine has had no time to produce generations of thinkers, philosophers, and historians; still less poets. The most it has are statisticians, who give it the precise figures of her commercial balance.

We do not doubt, however, that, thanks to material progress, this slow elaboration of a new race will eventually be completed. In the first phase of her existence as a nation Argentina, according to the spirit of her Constitution, fraternally opened her doors to all who wished to inhabit her soil. No restriction was placed upon the entry nor on the permanent immigration of foreigners; on the contrary, legislation and social customs combined to favour immigration. The result is, that the new arrivals have regarded themselves as alien, in matters of economics and politics, to the nationality with which they have become incorporated; believing that their mission consisted solely in creating and

circulating wealth, while regarding the solution of the great national problems with indifference.

But to-day the Argentine has entered upon a new phase; it must no longer merely receive, it must also incorporate all these elements of immigration, and, without awakening antagonism towards the foreigner, it must set to work to absorb him into the soul of the nation.

This faculty of assimilation is a virtue of the American soil. The United States have proved as much for North America, and it now remains for the Argentine to do the same for South America. The new generation of immigrants, having struck root into its hospitable soil, must live completely in the national life, absorbing those feelings of patriotism which animate the new citizen of the United States.

To give expression to these loyalist tendencies, we will confine ourselves to quoting the memorable words which were spoken in the Congress of Wisconsin, by an American congressman, born in Germany, the Hon. Richard Günther; words which were equally applauded and approved in Latin America. We shall perceive, through the very exaltation of his phrases, what unreserved devotion a naturalised foreigner may bring to his new country:

“We know as well as any other class of American citizens where our duty lies. We labour for our country in times of peace, and we shall fight for her in time of war, if ever such time arrive. When I say our country, I naturally mean our country of adoption, the United States of America. After passing through the alembic of naturalisation we are no longer Germans; we are Americans. Our attachment to America cannot be measured by the length of our residence here. We are Americans from the moment when we reach the American shore, until the day when we are laid to rest in an American grave.”

PART I

THE ARGENTINE FROM THE ECONOMIC STANDPOINT

CHAPTER I

THE GEOGRAPHY OF THE ARGENTINE

CLIMATE—SOIL—Geographical situation of the Argentine; its boundaries, its area.

Climate of various districts. The prevailing winds. Nature of the soil; its fertility; adaptation to the culture of cereals and the raising of live-stock—Transformation of virgin into fertile land—The Pampa—The cultivable area—Conditions favourable to production—The plagues of locusts.

RIVERS—Their exceptionally favourable influence—The hydrographic system—Network of navigable river-ways: the Rio de la Plata, the Rio Parana—Conditions of navigability—Canals.

PORTS—List of the principal ports, with a summary of their trade—Buenos Ayres: description of the port, its area, its capacity, tonnage; its docks—The Central Produce Market—Importance of Buenos Ayres in comparison with the great ports of the world—The port of La Plata—The port of Rosario; increase of its traffic; construction of the new harbour conceded to a French company—Bahia Blanca; its development—The decentralisation of traffic.

THE Argentine Republic occupies the southern extremity of South America and runs from north to south from $21^{\circ} 30'$ to $54^{\circ} 52'$ of south latitude; or 33° in a meridian line. From east to west it occupies a width of 20° , between 54° and 74° of longitude.

Its territory is bounded to the north by Bolivia and Paraguay; to the east by Brazil and Uruguay; to the west by Chili. Its boundaries by land are 2980 miles in extent on the west; 993 miles on the north; the river boundaries on the east are 745 miles in length. Finally, the shores of the estuary of the Rio de la Plata and the Atlantic form a stretch of 1614 miles; all of which represents a total boundary-line of about 6334 miles.

The superficial area of the Republic has not hitherto been calculated on the basis of a geodesical survey; it has been arrived at only by calculation from charts which are more or less approximate. According to the estimates most worthy of credence, and allowing for the latest rectifications

of the frontier, its present area is equivalent to 11,328,321 square miles. This is about six times the area of France, which contains only 203,905 square miles. The Province of Buenos Ayres alone is more than half as large as France.

The seasons in the Argentine, compared to those of the northern hemisphere, are of course reversed. The summer corresponds to December, January, and February; the autumn to March, April, and May; the winter to June, July and August; and the spring to September, October, and November.

In the matter of climate, the Argentine may be divided into three regions; those of the coast, the centre, and the Andes.

The coastal region comprises the Provinces of Buenos Ayres, Santa Fé, Entre Rios, and Corrientes. The average annual temperature is about 66·2° Fahr.; at Buenos Ayres it is only 62·6°. The average summer temperature is about 77°, that of the autumn 64·4°; of the winter, 53·6°, and of the spring, 62·6°. The hottest month is January, when the average is 77°; the coldest is July, with an average of 51·8°.

In this coastal region the extremes of temperature are 107·6° in summer and 41° in the winter; but these temperatures are both exceptional. However, a temperature of 95° is very usual on summer afternoons. It is a very unusual thing for the mercury to fall below freezing-point in winter or to remain there. Snow is also a very rare phenomenon, only to be seen perhaps once in five years.

A peculiarity of the Argentine climate in general is that the temperature will change very rapidly during the day, or even during a few hours; the change representing sometimes a difference of more than 36°, especially in the spring, which is the most usual season for these rapid variations.

The climate of the coast region—that is, of a country consisting almost entirely of plains—is, in general, influenced by the winds, which blow in gales at all seasons. Northerly and southerly gales are the most common; the first especially are very frequent. In Buenos Ayres one finds, during the summer, an alternation of sea and land breezes; the one during the day, the other during the night.

The northerly winds are always hot and even suffocat-

ing; they influence the nervous system, afflicting some people with neuralgic troubles. When these winds blow, the air is charged with electricity, until, the tension of the atmosphere having grown insupportable, a tempest comes to restore the equilibrium, to give place to another wind, coming from the south-west, and known as the *pampero*. This wind does not often last long, but it attains a velocity equal to that of a full hurricane. The *pampero*, so called because it is formed in the region of the pampas, is a wind full of ozone, and as such plays its part in disinfecting the vitiated air of the urban centres. But the effects of the *pampero*, and especially of the south-westerly winds, on the Rio de la Plata, where they produce a violent swell, are sometimes terrible.

As for the rain, there is no regularity in its fall; which naturally tends to render the results of culture and of cattle-breeding variable. Rains are more frequent in summer and autumn than at other times; while the least rainfall is that of winter. At Buenos Ayres it is rare for a month to pass without rain, which is often torrential, and accompanied by hail.

The climate of the central region, if we except the mountainous portions of the Provinces of San Luis and Córdoba, is distinguished from the seaboard region by its greater dryness and its sudden variations of temperature. In the plain the summers are very hot, and it is not uncommon to see the thermometer at 104°; while during the winter there are very hard frosts. As on the coast, northerly and southerly winds are the most frequent. Rain is rarer than on the coast, and falls almost exclusively in summer and in autumn: with rare exceptions the winter is perfectly dry.

In the Andean region the climate varies according to the height above sea-level, but is always characterised by sudden variations in the daily temperature, and by excessive dryness. On the eastern slope of the Andes and the plateaux of the north it never rains. These regions are continually swept by furious winds, which make agriculture impossible. To the intense heat of the day succeeds the cold of the night, with differences of temperature that sometimes amount to 68° in twenty-four hours.

The climate of the Argentine, with a few exceptions, has

the reputation of being extremely healthy, on account of the sudden changes of temperature and the dryness of the air predominant over the greater part of the country. These atmospheric conditions are, to be sure, not favourable to affections of the lungs; but, on the other hand, they contribute to prevent epidemics. We find that among adults and adolescents the figures of mortality are no higher than the average figures for the healthiest countries in the world. The statistics drawn up by the City of Buenos Ayres even show that foreigners have a longer expectation of life than the indigenous population.

In matters of climate one must be careful not to become confused, as so many Europeans do, between our Argentine Republic and the neighbouring country of Brazil, which is nearer the equatorial zone. Favourable to human health, the Argentine climate is also, as we shall see, particularly favourable to most kinds of agriculture and to the breeding of cattle; from this point of view it is a privileged land, which calls only for labour to become productive.

For a greater part of its area the Argentine soil unites the geological and climatic conditions favourable to the production of cereals and for stock-raising. It is in the fertility of the cultivated lands and the richness of the pastures that the whole economic value of the country resides.

According to recent investigations by competent persons, the surface of the Argentine is largely composed of sandy soil; but a sandy loam is often found, also, more rarely, a gravelly clay; but there is very little actual clay. Other soils, such as absorbent calcareous earth, are not often found. In the subsoil a sandy clay abounds, the occurrence of clay and calcareous earths being greater in the subsoil than in the soil.

From the chemical point of view, the high percentage of potash—which remains practically undiminished—long ago attracted the attention of the agronomist. Phosphoric acid is also found, though in less proportions. Lime is often found in small quantities in the best soils in those districts most devoted to agriculture; and nitrogen is often abundant, except in the southern region of the Republic, and in some parts of the western region, where the rains are less

frequent, the winds violent, and the vegetation poor and stunted.

Saltish soils are of frequent occurrence in the west and south, but in general the salt is not in sufficient proportions to hinder agriculture, especially when suitable means of culture are employed.

Soils of great fertility are found in the central and southern regions, and occupy vast areas in the Provinces of Buenos Ayres and Santa Fé, and in parts of Córdoba and Entre Rios. "There are areas which are apparently of poor fertility," says M. Charles Girola, from whom we derive these data, "which yield magnificent crops, thanks to irrigation or a better distribution of the water supply; especially in the west and the south."*

But in the Argentine Republic experience has shown that there is scarcely any soil which is not capable of profitable use, either for agriculture or stock-raising. It is very frequently remarked that lands which for a long time had been regarded as poor and almost sterile, unfit for exploitation, are to-day converted into admirable natural or artificial prairies, feeding numerous herds of sheep or cattle; or have more often been cleared by the colonist, and are now yielding excellent crops. This wonderful transformation is chiefly due to the pasturing of flocks and herds, which break up and enrich the soil; also to the fertilising organic matter contained in the turf; and finally to the addition of innumerable dead insects, which are brought by the wind and form a deposit on the soil, which acts as a kind of natural manure.

These favourable conditions of fertility are all united in the region known as the *Pampa*, which occupies the greater part of the temperate zone of the country. It consists of immense and virgin plains, which stretch to the horizon almost without landmarks or changes of level, and offer admirable opportunities both for agriculture and stock-raising.

Nearly all those Argentine lands which to-day bring fabulous prices were referred to, at an earlier period, as

* *Investigación agrícola en la República Argentina*, by Charles Girola, Agronomic Engineer, Head of the Agronomic Bureau in the Ministry of Agriculture. (1904).

"lands good for nothing." For this reason a considerable premium should be put on the theoretical estimate, made *a priori*, of the areas suitable for advantageous cultivation, in proportion as human labour works its transformation.

It is difficult to estimate, except in the most approximate manner, the cultivable area of the Argentine. It should be not less than half the total area, or, in round figures, 370 millions of acres. Of this estimate at least two-thirds represents land suitable for stock-raising, leaving available for the production of cereals about 122 millions of acres; of which, at the present time, only a fifth part is under cultivation. We may see, by this simple comparison between the future and the present, that agriculture has still a great future before it and a large margin of development.

To give a true idea of this power of production, it is enough to recall, with M. Emile Daireaux, who has described the great farms of the Argentine pampa, that the plough, under the most favourable of climates, meets no obstacles in the way of hills or forests; not a tree, not a rock, not even a pebble in the soil. All European crops give there an abundant harvest, without expenditure upon manure, without shelter for the stock; the colonist may even content himself with a modest wattled hut, protecting him from the mid-day sun or the cold breeze of the night. The soil is everywhere friable; no painful struggles retard the speed of the plough, which traces at one stretch a furrow miles in length without turning the ploughshare. The plough is drawn by four horses, reared at hazard in the open air, knowing no grooming, no complicated training; and sometimes a single hand is able to manage two teams and ploughs.

Thanks to the frequentation of these lands for centuries by horses and cattle, these alluvial deposits, rich in natural manures, have an apparently inexhaustible fertility. Awakened by labour from its eternal sleep, the soil is so vigorous that one finds numerous instances where the same grain, sown for twenty successive years in the same place, yields always the same abundant harvest.

The only serious scourge which can menace the creative power of the earth, independently of the always to be dreaded drought, is the invasion of locusts.

These invasions take the form of flying armies of locusts passing between earth and sky, and revealing their passage by the semi-darkness they produce in the regions over which they travel. Leaving the hot deserts of the tropical regions, the locusts advance in their phalanxes, sometimes 50 or 60 miles across; swarm succeeds swarm uninterruptedly for several days, leaving behind them no trace of vegetation. They fill the wells, stop the trains, by opposing veritable barriers of their bodies, obstruct the rivers in which they drown, and sometimes even, by the accumulation of their bodies, form a bridge over which the rear-guard can pass.

Serious though this danger may be, especially in the more exposed provinces, such as Santa Fé, we must say, in honour to the Argentine Republic, that it has never paralysed initiative; as is proved by the continuous increase in the area of sown soil. Very fortunately, too, this plague, like that of Egypt's in Pharaoh's dream, is intermittent, and an interval of seven years often passes before its return. Moreover, various means are being put into practice for defence against this formidable evil; means for preventing the reproduction of the insect, or of checking its development before the period of flight.

A special organisation has been formed under the name of the "Commission of Agricultural Defence," in order to co-ordinate and direct the work of protection from the devastations of the locust, and considerable sums are devoted to this object every year. Regiments, mobilised along the line of passage, sweep the agglomerated masses of insects, in dense ridges, towards the ditches full of quicklime in which they are buried. Hundreds of tons of locusts perish thus, but unhappily the plague seems neither cured nor diminished.*

RIVERS

The economic progress of the Argentine Republic is intimately connected with the development of its means of communication, its traffic-ways. The railways and the ports

* See *Le Correspondent* of the 10th of February, 1905, containing an article by M. Emile Daireaux.

have been the chief factors of the country's prosperity, as by facilitating the outlet of agricultural products, they have allowed the soil to attain its whole value.* It is therefore pertinent to state, in some detail, how the Argentine is equipped from this point of view, and the part played by such equipment in the commercial development of the country.

By the truly providential nature of its soil, the Argentine is not only marvellously fertile, but is also a country largely opened up by waterways, and offering exceptional facilities from the point of view of international exchange.

One of the most notable peculiarities of this country is that its rivers, which are, as it were, inland seas, accessible to vessels of the highest tonnage, and, penetrating the very heart of the most fertile regions, place it directly in communication with the exterior. What is still more notable is that these rivers flow with an almost constant current over level beds, between perpendicular banks, so that the river-banks form a series of natural ports, with wharves of indefinite length. Nature has well prepared the way for the handiwork of man.

The hydrographic system of the Argentine Republic falls into three main groups: (1) the rivers tributary to the basin of the Rio de la Plata; (2) the rivers which terminate their course in lakes or pools, or lose themselves in forming marshes or salt swamps, and are finally absorbed by the porous soil of the Pampa; (3) the rivers which empty themselves into the ocean.

To the first group belong all the rivers which water the Provinces of Corrientès, Entre Rios, Chaco, Jujuy, and Salta, a portion of those of Santa Fé, Córdoba, and Buenos Ayres, and the Territories of Chaco and Misionès. To the second group belong all the water-courses of the Provinces of Tucuman, Catamarca, Santiago de l'Esterro, La Rioja, San Juan, Mendoza, San Luis, the greater part of those of Córdoba, and part of those of Buenos Ayres. To the third

* Perhaps it need hardly be explained that the meaning of this statement is that the rent of agricultural land reaches its par value when it is absolutely accessible—say, beside a port. With high ocean freights and low railway freights any land upon a railroad would be almost equally accessible economically—that is, it would reach almost its whole value.—[TRANS.]

group belong also a portion of the rivers of Buenos Ayres, and all the rivers of Patagonia. As we have seen, the waterways of the Province of Buenos Ayres come under all three headings.

The best-known river of the Republic, and that which gives the Argentine its name, is the Rio de la Plata, formed by the junction of two rivers no less important, the Parana and the Uruguay. It forms an immense estuary, which pours into the ocean the waters of a whole hydrographic system, a vast basin occupying nearly 1,540,000 square miles, or a fourth part of South America. This estuary is 25 miles wide at its head, and where its waters reach the ocean attains a width of no less than 217 miles, its average width being 111 miles; and its superficial area covers 13,475 square miles.

Apart from certain hindrances of the nature of islands or sandbanks, the Rio de la Plata offers relatively easy access to vessels of the highest tonnage making for Buenos Ayres or towards the interior. Its level is influenced by the tides of the ocean, and also suffers very violent changes when the easterly or south-easterly winds pile up the waters of the sea in the estuary.

The river which is the continuation of the Rio de la Plata towards the north, and with it forms the vital artery of the Argentine, is the Parana; its length is 2980 miles, of which about one-half flows through Argentine territory. Its width varies from 22 to 31 miles, and its average annual flow is estimated at nearly 39,000 cubic yards per second, which represents one and a half times that of the Mississippi, twice that of the Ganges, four times that of the Danube, five times that of the Nile, and nearly a hundred times that of the Seine. It receives, in its turn, as an affluent, the Paraguay, a river which traverses the country of the same name, and thus places it in communication with the sea, by way of the Parana and the Rio de la Plata.

This network of rivers forms a magnificent series of waterways. Rising from the central provinces of Brazil, the Parana passes through the rich afforested regions of Chaco, communicates by means of its affluent with Paraguay and South Brazil, and then flows through the Provinces of Corrientès, Entre Rios, and Santa Fé; that is, through the

regions of great forests and wide holdings, and then empties itself into the inland sea of the Rio de la Plata, where it mingles with the Uruguay, another means of communication between the Provinces of the East and the Atlantic Ocean.

Concerning its navigability, here are some data taken from an interesting little book by M. Georges Hersent on the port of Rosario:—

“During nine months of the year the navigation from the sea to the port of Rosario presents no difficulties to the great transatlantic steamers; indeed, it may be said that their maximum draught is limited only by the depth of the ‘Canal Nuevo,’ the new channel of Martin Garcia. Ships drawing 22 to 23 feet can load at Rosario and leave directly for the open sea, or come to discharge their cargo at the port.

“During the period of low water, which lasts for barely three months in the year—from September to the end of December—there are only two channels with a less depth than 21 feet, that of Las Hermanas and that of Paraguayo. In the former, the island of Las Hermanas separates the bed of the river into two channels, of which the one most in general use hitherto has a depth of only 20 feet; but vessels may avoid it to-day, as the western channel has been dredged and deepened, and is of more than sufficient depth.

“The second channel, which used to present some difficulty, is that of the Paraguayo, where there was only 17 feet of water. This state of things was happily not permanent, as the National Government has undertaken, at this spot, the work of deepening and levelling the Parana, which was completed in the course of the year 1904.

“We may add that the State is engaged in maintaining, over a minimum width of 108 yards, a depth of 19 feet below the level of low water in the channel of Martin Garcia, and of 21 feet 1½ inches over the whole course of the Parana, as far as Rosario. This maintenance will be necessary only at certain points in the river, as the depth of the latter is in general considerably above those figures.”

As we have already said, the real commercial value of the Parana lies in the peculiarity of its banks, which make it along its whole course a series of natural quays. These banks form in many places almost vertical walls, and as the

bed of the river is almost everywhere 25 feet below the surface, it follows that ships of large tonnage can not only ascend the river as far as the city of Rosario, or even to Colastiné, but can moor themselves alongside the banks as to a quay, without any labour or preparation being necessary.

At some places—as at Rosario for example—the bank properly so-called is overhung by low cliffs, forming a kind of promontory raised many feet above the water-level, so that it is possible to utilise this difference of level in loading cargoes. By means of inclined planes or gangways, called *canaletas*, the goods collected in warehouses built upon the banks are quickly, thanks to the slope of the gangways, run into the holds of the vessels moored to the banks. It will be admitted that these conditions are unusually favourable to navigation, and explain the extraordinary development of a country in which nature has thus surpassed herself.

Regarded as traffic-ways, these rivers play a part of the highest importance, by giving easy access to the sea, without re-shipment, to provinces more than 600 miles inland, such as those, for instance, of Chaco and Corrientès.

The Rio de la Plata affords a natural traffic-way, accessible to all vessels, between Buenos Ayres and Montevideo, which are more than 120 miles apart. All the large transatlantic steamers which used some time ago to put in at La Plata now come up to Buenos Ayres, which has thus become the headquarters of a dozen wealthy steamer-lines engaged in the European service.

Thanks to the works established for the deepening of the Parana and the regularising of its course through the sandy districts, great steamers of 10,000 tons can to-day go up to Rosario: steamers of 6000 tons can easily reach Parana or Colastiné; and special boats built for the river service can ascend as far as Corrientès, and from there towards Brazil, Paraguay, or Uruguay: a distance of more than 1200 miles.

Besides these “flowing roads,” we must mention others, which, although of less importance, are none the less destined to exercise a beneficent influence over the economic life of the premier province, and the development of its agriculture, thanks to the cheap transit which they will offer in time to come. We refer to the network of canals which the

Government of the Province of Buenos Ayres has projected or put in hand.

In the first edition of this book we announced the construction of a canal 155 miles in length, which would unite the Mar Chiquita, its point of origin, and Baradero, its terminus; embracing in its course the following centres of rural produce; Laforcade, Junin, O'Higgins, Chacabuco, Salto, Arrecifes, and Baradero. This enterprise, which was put in hand at the expense of the Province of Buenos Ayres, failed with a crash. After the work had been enthusiastically commenced, after several millions of dollars had already been spent, it was discovered that the work could never be completed in a successful manner, nor could it ever yield a return for the sums raised, which were thus swallowed up in this disastrous enterprise.

Men whose technical competence allowed them to speak with authority—for instance, the engineer, Luis A. Huergo—basing their statements on scientific principles, had estimated that the undertaking could never be practically realised; and, as we have seen, the result justified their predictions.

PORTS AND HARBOURS

The nature of the river-banks being such as we have described, the ports utilised by trade along the course of the great Argentine rivers are very numerous.

After La Plata and Buenos Ayres, which share the traffic of the northern part of the Province of Buenos Ayres, we must mention Campana and Zarate, for at these two ports also the exports of frozen meat are very considerable; San Nicolas, a great centre for cereals, whose harbour is to be transformed and equipped by the new concessionnaire, the "Société Anonyme du Port et Entrepôt de San Nicolas"; and Villa Constitución, whence the produce of the south of Santa Fé and Córdoba is exported, and whose capacity is 7000 to 8000 sacks a day.

After Rosario, which is the second centre of the Republic, the chief ports ascending the Parana are as follows: San Lorenzo, Diamante, Santa Fé, Colastiné, Parana, Esquina, Goya, Bella Vista, and Empedrado. Corrientès is the last important commercial centre on the banks of the Parana.

All these ports had an annual tonnage amounting to 2,188,000 tons in 1906, 2,366,000 in 1907, and 5,396,000 in 1908, so that the statistics for these three years of the traffic for the Parana, including Rosario, amounts in round figures to 9,891,000 tons, for the distance of 804 miles.

At Santa Fé work has been commenced on the installation of a more modern harbour; the Province, by consent of the State, has devoted a sum of £6,000,000 to this undertaking. There has also at times been a question of equipping the port of Colastiné, which is one of the principal centres of export for cereals and the timber brought by the French railway system of Santa Fé. The average trade passing through this port amounts to more than 500,000 tons, and, so far, there has been no need to add any improvements to the natural advantages of the river-banks. We see by this that there is no need to create ports on the Parana, only to utilise or develop existing conditions.

We give below a table of the trade statistics of the principal ports of the Argentine Republic, remembering that with the exception of Buenos Ayres their trade consists largely of the exports of produce:—

Traffic in Registered Tons at the following ports in the years 1907 and 1908.

	1907	1908
Rio Gallegos *... ..	63,500	41,000
Madryn *... ..	118,000	19,900
Commodore Rivadavia *... ..	59,000	1,990
Ushuaia *... ..	25,000	11,800
Diamante... ..	131,000	375,000
Santa Fé... ..	127,000	440,000
Parana... ..	253,000	636,000
Esquina... ..	117,000	374,000
Goya... ..	163,000	404,000
Bella Vista... ..	136,000	399,000
Empedrado... ..	116,000	306,136
Corrientès... ..	230,000	504,433
Rosario... ..	1,089,000	1,924,000
Buenos Ayres... ..	6,471,000	7,555,000

The premier port of the Argentine, and we might add of South America, is Buenos Ayres, which in extent and connections rivals the finest ports of Europe.

* The tonnage of these ports is for the years 1904 and 1906, no corresponding figures being obtainable for 1907 and 1908.

It consists of two harbours, of which one, situated at the mouth of a little river called Riachelo, is frequented principally by steamers of light draught and sailing-ships; the other is known as the Port of the Capital, or more commonly Port Madero, from the name of the contractor responsible for the harbour works. The port contains, altogether, four basins and $6\frac{1}{3}$ miles of quays, four of which are situated on the flank of the city. Along these quays are disposed immense warehouses, able to contain 29 millions of tons of merchandise, as well as great flour-mills and grain-elevators, with a capacity of more than 200,000 tons, which cost more than £1,000,000 sterling.*

This harbour has cost in all some £7,000,000, and every year a sum of nearly 3 millions of paper piastres, or £200,000, is spent upon the work of maintaining the channel of approach at a proper depth. At the season when the traffic is densest, the port holds as many as 1400 steamers and sailing-vessels, loading and unloading. It is evident that, with the constant increase of commercial activity, further enlargements will soon be necessary. The Government is at the present moment considering a gigantic scheme of improvement, with a view to which several groups of European contractors have already submitted estimates.

In order to give some idea of the importance of the plant at the disposal of exporters at Buenos Ayres, we need only speak of the great market or *embarcadero* for live-stock. It covers an area of 350,000 square yards, of which 117,000 are occupied by buildings; its capacity is 40,000 sheep and more than 1500 cattle.

There is also another notable establishment, reputed to be the largest in the world: the Central Produce Market. The building is of four stories, covers an area of 180,000 square yards, and cost £830,000.

The following table shows the quantities, in metric tons,

* The net capacity of the customs warehouses is over 400,000 tons; as products remain there on an average for two months, we have an annual figure of $6 \times 400,000 = 2,400,000$ tons. This is the maximum of goods per annum which the customs dépôts can at present receive.

of products entering the market between February and September in 1905, 1906, 1907 and 1908.

				TONS OF 2205 lbs.			
				1905	1906	1907	1908
Maize ...	...	...	...	721	6,882	9,600	10,742
Wheat ...	...	...	...	34,246	50,379	73,245	47,566
Flax ...	...	...	...	1,115	3,636	5,584	10,757
Barley ...	...	...	...	83	368	1,361	1,695
Oats ...	...	...	...	1,688	3,624	6,685	15,737
Hides and skins	...	...	...	17,713	18,541	17,115	22,371
Other products	...	...	...	1,786	1,838	1,804	2,155

Besides these products, in 1906 there were 87,400 tons of wool entered at the market; in 1907, 84,600 tons; and during the first nine months of 1908, nearly 43,000 tons. If the year 1908 seems to show a great decrease in the entry of wools, the fact is really due to the larger amounts entered in October, November, and December, which are not included in the figures for 1908.

These figures show the importance of this establishment to Argentine trade. It is not a mere *dépôt*, as one might suppose, but a veritable Exchange, where important transactions take place in all the chief products of the country.

The port of Buenos Ayres owes its rapid development to this excellent equipment. In 1880, before the scheme of works was commenced, its trade amounted scarcely to 660,000 tons; since then it has maintained a constant increase, and now reaches the figure of more than 13,000,000 tons.

Below is the inward and outward trade of the port of Buenos Ayres:—

Years.						Tonnage.
1897 ...	...	...	...	...	...	7,865,000
1898 ...	...	...	...	...	..	8,115,000
1899 ...	...	...	...	...	...	8,742,000
1900 ...	...	...	...	...	...	8,047,000
1901 ...	...	...	...	...	...	8,661,000
1902 ...	...	...	...	...	...	8,903,000
1903 ...	...	...	...	...	...	10,269,000
1904 ...	...	...	...	...	...	10,400,000
1905 ...	...	...	...	...	...	11,589,000
1906 ...	...	...	...	...	...	12,582,000
1907 ...	...	...	...	...	...	13,295,000
1908 ...	...	...	...	...	...	15,111,000

To appreciate the value of these figures, we must compare

them with those relating to the principal ports of the world, where we shall see that Buenos Ayres occupies, in matters of tonnage, the twelfth place among the ports of the world. The tonnage of Hamburg and Liverpool, which occupy the first two places, is only about 40 per cent. greater than that of Buenos Ayres.

The importance of the port of Buenos Ayres is chiefly due to the fact that it handles nearly all the imports of the Republic—84 per cent. in 1908—while of exports it handles 51 per cent. This confirms what we have already said of the absorption, by Buenos Ayres, of a great portion of the vital forces of the country, which develops it disproportionately to the rest of the country. The equipment of the new ports of Rosario, San Nicolas, and Santa Fé, and the enlargement of the port of Bahia Blanca, will constitute a useful task of decentralisation, favourable to the economic future of the country.

La Plata has the advantage over Buenos Ayres of a deeper basin, which renders its harbour accessible at all times to ships of the highest tonnage. Until 1903 it was the point of call for the large transatlantic liners outward or inward bound, which observed fixed hours of arrival and departure.

The harbour of La Plata, 3 miles from the town, contains about 2700 yards of quays and immense warehouses, capable of storing 600,000 sacks of grain. It is the terminus of the lines of railway serving the richest districts of the Province of Buenos Ayres, and is destined to undergo further developments, as the provincial Government intends to connect it with the agricultural centres by a network of light railways. This is the principal port to-day for the exportation of the agricultural products of the central Pampa.

On account of the economic importance of this port, the State has taken it over from the provincial Government, in consideration of a price of £2,360,000, with a view to nationalising it and exploiting it for the benefit of the Argentine State. This measure will allow of the organisation and the improvements which may be necessitated by the increase of its traffic. On the other hand, there is constant talk of connecting the port with that of Buenos

Ayres by a canal some 29 miles long, which would form an artificial extension of both harbours.

Rosario holds second place in the Argentine, both in the matter of population and in the extent of its trade. It is the true agricultural capital of the Republic, and the principal outlet of eight Provinces, which use the Parana as their waterway. In his little book on the port of Rosario, M. G. Hersent speaks of the advantages of its situation in the following terms :—

“Situated in the very centre of an immense tract of country which is extremely rich and fertile, which to-day furnishes more than half the cereals exported by the whole Republic, Rosario is the necessary outlet of the harvests of nearly the whole Province of Santa Fé, of the whole of Córdoba, and of a portion of Entre Rios; three provinces, whose area is almost equal to that of France. It is the market for the sugars and alcohols of Tucuman, the timber of Catamarca, and the minerals of Rioja and Chaco, which are so far exploited only in a rudimentary fashion.

“In order to fulfil this economic need of vital importance to the country, Rosario enjoys the most complete and efficacious means of access and penetration. Five great railroads converge upon it, bringing to it all the products of the interior, especially grain and cattle. This network of lines, whose rapid creation has been one of the most powerful factors of the development of Rosario, already contains more than 2700 miles of permanent way; in 1899 the traffic in the Rosario district already amounted to 3,400,000 tons of merchandise, consisting chiefly of the produce of the soil. The extension of this railway system is proceeded with in a more or less continuous manner, so as to increase the value and the opening up of new countries. Very shortly the line to Bolivia will have its terminus in Rosario.

“But that which gives this port, so well equipped, an incomparable value, is the magnificent Parana, which, on the one hand, places it in direct communication with the sea, and on the other unites it with the interior by a waterway of several thousand miles in length, constituting a means of transport as easy as it is economical, which brings it all the waterborne traffic of the upper Parana and of the Paraguay.”

The statistics given above show the important place which this port has taken in the last few years, and the continued increase of its traffic, which to-day amounts to some 3,000,000 tons per annum, whereas in 1899 it amounted only to 1,600,000 tons.

Hitherto these results have been obtained with a rudimentary equipment, and by utilising the fortunate disposition of the river-banks; but the intense pressure of traffic occurring at this point proves the necessity of a large harbour, which would allow the products of the interior to find their outlet towards the Parana and the sea. The need has given birth to the means without waiting for modern improvements.

To-day the port of Rosario has entered upon a new phase, which may clear the way for a still greater development. Its exploitation has been made the object of a concession which, in 1902, was granted to a French company, having at its head Messieurs Hersent & Son and the Creusot works, on condition that the latter should undertake the equipment of the port on modern lines. The scheme comprises, among other items, the construction of over 2 miles of quays and a dock which will, with the existing quays, give a total of $2\frac{3}{4}$ miles; the construction of warehouses, the mechanical equipment of the quays, and also the installation of a grain-elevator of large capacity, which will load a cargo of 5000 cubic yards in four hours.

To-day this scheme is nearly realised, and Rosario will be able to meet all the requirements of a perpetually increasing trade. The new railway lines, which will soon reach the port, will complete its organisation.

As recompense, the Government has granted the concessionnaires, for forty years, the monopoly of gathering all harbour dues over a radius of 7·4 miles around the city of Rosario, and over a distance of 12·4 miles up-stream and down-stream. The State shares in the takings of the concession to the extent of 50 per cent. of the net profits after the expenses of exploitation are deducted, which are estimated at 40 per cent. of the receipts, and after the subtraction of the sums necessary for paying the interest on and redeeming the capital engaged.

From all these data concerning the ports of the Parana, it will be seen that great efforts are now being made to increase the means of communication in proportion to the economic expansion of the country, and to multiply and facilitate outlets upon the points nearest to the centres of production. These efforts are also tending to decentralise the traffic, to the profit of a larger number of ports: in order to avoid the over-crowding of a few great centres to the detriment of other parts of the country. This policy will have happy results: firstly, from the point of view of the export trade, since it will decrease the net cost of transport; and secondly, from the standpoint of the import trade, as the imports, instead of converging upon Buenos Ayres and thence proceeding by rail, will reach the neighbourhood of the inland centres of consumption more directly and at less expense.

For these same reasons serious improvements have been carried out at the port of Bahia Blanca, which is situated on the sea-coast in the south of the Province of Buenos Ayres, whose importance has increased more especially since the opening of the military harbour to commerce. Bahia Blanca is one of the termini of many railways of the south; it is thus connected with the regions of agriculture and stock-raising on a large scale, which are able to send their produce directly from this port to Europe. The wool trade is particularly brisk there, and the cereal trade also, since the Pampa has been transformed into a wonderful agricultural country.

Seconding this development, already stimulated by the Southern Railway Company, which built the harbour known as "Ingenio White," the Buenos Ayres and Pacific Railway Company has also commenced at Bahia Blanca a magnificent harbour, called Galvan Harbour. Built of reinforced cement, it is equipped with powerful grain-elevators, built of stone, splendid iron warehouses, sheds, etc. This harbour, when completed, will have cost some £10,000,000; it has already a considerable trade, which will increase in proportion to the agricultural development of the great belt it is intended to serve, which includes the Provinces of San Juan, San Luis, Mendoza, the Territory of the Central Pampa, and a large part of the Province of Buenos Ayres. The importance of

this harbour will also be increased by the various railways which will unite Bahia Blanca to the remote districts of the Republic. The French company, now building a line running between Rosario and Bahia Blanca, will also have its own harbour, the Puerto Belgrano, and is actively carrying on its construction.

Finally, the creation of a harbour has been projected at Mar del Plata, the fashionable watering-place of the Argentine, and another in the Bay of Samborombon, two hours from Buenos Ayres.

To sum up: the Argentine possesses at the present time, in the matter of ports, an equipment capable of keeping pace with the growth of its powers of production. Its rivers are truly arms of the sea, collecting on their banks, thanks to their numerous ports, the products of the central Provinces, which are thus connected with the Atlantic over a distance of more than 600 miles. It is the same on the Atlantic sea-board, where advantage has been taken of the least natural facilities afforded by the coast-line to multiply the outlet to exportation, in proportion as the progress of agriculture has travelled south.*

It is true that this great organisation can only yield the true measure of its value in years of good harvests, since upon the latter all commercial activity depends; yet it must be recognised that, however largely the future has been discounted in equipping these ports, the estimates of future traffic have scarcely ever hitherto been deceptive.

* Among the principal ports of the south we may cite Madryn, Rio Gallego, Comodoro Rivadavia, and Ushuaia, in Tierra del Fuego. These ports, by a wise disposition of the Government, seeking to increase the population and encourage progress in the southern regions of the Republic, have been made free ports; that is all the operations of the douane may be effected without the payment of fiscal dues.

CHAPTER II

RAILWAYS

Rapid development of the railway system—Tabulation of its extension in each Province—Table showing the general results of its exploitation—List of the lines actually running.

List of railway companies, with the length of their roadways and their returns—The difficulty of obtaining exact figures—The tariffs of the railway companies—Form of concessions, and suppression of guarantees.

Comparison of the railway system of the Argentine with the railway systems of other countries—Proportion of mileage to area and population.

Extension of the system in the near future, owing to the numerous concessions granted—The mileage of these concessions—Insufficiency of plans and previous examinations—Examination of the most important concessions for which the capital is already guaranteed—The dimensions which the railway system will attain after the concessions are realised—Programme of narrow-gauge construction; its value.

Meeting of the Argentine with the Chilian railways crossing the range of the Andes—The aerial mining railway in the Province of La Rioja.

Railways in relation to agricultural development—Insufficiency of transport at the moment of harvest; its causes and remedies—Necessity of a better organisation which shall respond to the stress of production.

THE same progressive spirit which the Argentine has manifested in the improvement of inland or maritime waterways is to be seen in the establishment of its network of railways. Here again development has been rapid, and results plainly effectual in making the wealth of the country available. To cite one example only, it is thanks to the railways that agriculture and stock-raising have been able to attain to such large dimensions in the Province of Buenos Ayres; a Province far less favoured than its northern neighbours in the matter of waterways. All the lines running south have greatly contributed to the transformation of the Pampa and the increase of the cultivated area over an immense radius where before there was nothing but untilled soil, which was hardly suited even for stock-raising.

The railway has thus played a great part in civilising

the Argentine; raising new wealth from soil as yet unexploited, joining up the chief agricultural centres, and affording them an outlet to the rivers or the sea. The railway has also been auxiliary to the colonising movement, stimulating the creation of new settlements along its track by concessions of soil.

This latter work is not yet terminated, if we are to judge by the great number of concessions now under consideration, in which the initiative is due to the State or to private individuals. On the other hand, there is a great tendency to build cheap narrow-gauge railways, in order to save expense either in building or in working, so as to obtain a final reduction of the freight tariff. In short, we find, in the case of railways as well as in the case of waterways, that while the continuation of good harvests is counted on, there is also an effort to keep up, by multiplying the means of transport, with the economic expansion of the country.

It was in 1854 that the Government of the Province of Buenos Ayres granted the first railway concession, for a line 24,000 *vares** in length, running west from Buenos Ayres. In 1857 a first section, some 6 miles long, was opened for traffic.

After these humble beginnings the railway system of the Argentine developed with great rapidity; on the 1st of November 1908, its total length was 13,700 miles, representing an average development of nearly 273 miles per annum. All the Provinces are represented in these figures, but of course in very unequal proportions; as the opportunities of construction have not been everywhere the same. Their installation has gone hand in hand with agricultural development; and the Provinces most adapted to agriculture have also been favoured with the most plentiful means of transit, as the following table will show.

Among these Provinces we must note Buenos Ayres, Santa Fé and Córdoba as the three which have made most agricultural progress; for they alone furnish more than 80 per cent.

* The *vare* is equivalent to 886 millimetres, so the length of the line was about 13 miles. At that period, in the region of the concession, the *rare* of land had only a trifling value.

of the total exports. Among the Territories La Pampa has the greatest mileage of railways; a mileage which will very shortly be doubled, to judge by the number of new lines projected, which in the near future will cross it in every direction, thus facilitating the outlet of its abundant produce.

It is in the last ten years that the network of Argentine railways has reached its full expansion, as is shown by the second table; which also gives the amounts of capital invested in these undertakings.

Mileage of Railways on the 1st of November 1908.

Provinces and Territories.	Mileage.	Ratio of Mileage to Area.		Miles per 1000 inhabitants.
		In kilometres per 100 sq. kilometres.	In miles per 100 sq. miles.	
Province of Buenos Ayres ...	4583·4	2·42	3·89	3·06
„ „ Santa Fé ...	2254·1	2·75	4·42	3·03
„ „ Córdoba ...	1857·1	1·86	3·00	3·66
„ „ Santiago de l'Estero ...	810·9	1·27	2·04	4·24
„ „ Entre Rios ...	610·5	1·32	2·12	1·58
Territory of Pampa Centrales ...	556·9	·61	·98	9·15
Province of Corrientes ...	451·9	·86	1·38	1·42
„ „ Mendoza ...	410·0	·54	·72	2·25
„ „ Tucuman ...	384·3	2·68	4·31	1·41
„ „ La Rioja ...	319·2	·57	·92	3·77
„ „ San Luis ...	303·8	·66	1·06	2·97
Territory of Rio Negro ...	239·4	·20	·32	11·25
Province of Salta ...	228·0	·23	·37	1·63
„ „ Catamarca ...	226·3	·30	·48	2·15
„ „ Jujuy ...	218·1	·71	1·14	3·81
Territory of Chaco ...	97·2	·11	·17	4·54
Province of San Juan ...	85·7	·16	·26	·81
Federal Capital ...	55·3	47·90	77·12	·05
Territory of Chubut ...	43·5	·03	·05	3·96
„ „ Neuquen ...	2·6	·004	·006	·10
Total and Averages ...	13,708·2	·77	1·24	4·97

General Statistics of the Argentine Railways up to 1908 inclusive.

YEAR.	Total Mile- age of Lines in Operation.	Travellers Carried.	Merchandise Carried (in tons).	Gross Receipts.	Total Expenditure.	Net Profits.	Capital Employed.	Interest on Capital.
1886	3623	6,458,674	2,948,000	£3,231,793	£1,842,928	£1,388,865	£29,678,182	4·68
1887	4138	8,199,051	3,844,000	3,903,317	2,193,874	1,709,443	35,515,525	4·81
1888	4702	10,106,342	4,410,000	4,485,511	2,501,160	1,984,351	39,429,794	5·03
1889	5071	11,103,986	6,542,000	3,916,766	2,713,349	1,203,417	50,991,159	2·36
1890	5857	10,069,606	5,420,000	5,209,808	3,517,081	1,692,727	64,368,563	2·63
1891	8746	10,820,003	4,620,000	4,192,320	2,865,739	1,326,581	76,068,790	1·74
1892	8506	11,788,398	6,037,000	3,907,794	2,341,532	1,566,262	88,359,466	1·77
1893	8602	12,843,404	7,169,000	4,864,243	2,562,921	1,801,322	94,814,475	1·90
1894	8712	13,928,061	8,143,000	4,580,898	2,616,385	1,964,512	96,575,886	2·03
1895	8766	14,573,037	9,650,000	5,278,861	27,692,293	2,509,568	97,071,866	2·59
1896	8981	17,248,485	10,914,000	6,230,273	3,216,166	3,034,107	99,565,261	3·05
1897	9162	16,410,945	8,981,000	5,658,616	3,311,680	2,346,936	101,643,263	2·31
1898	9595	16,478,035	9,429,110	6,648,302	3,820,624	2,827,678	104,703,419	2·70
1899	10,194	18,014,503	11,819,000	8,261,291	4,486,453	3,774,838	105,323,332	3·58
1900	10,286	18,206,422	12,659,000	8,280,269	4,746,551	3,533,718	108,315,125	3·26
1901	10,499	19,689,115	13,988,000	8,773,217	4,825,720	3,947,497	107,667,700	3·67
1902	10,790	19,815,439	14,030,000	8,654,517	5,995,089	2,659,428	112,189,241	3·62
1903	11,429	21,025,456	17,024,617	10,279,703	5,248,045	5,031,638	114,617,917	4·50
1904	11,552	23,120,095	19,727,000	12,380,409	6,542,222	5,834,187	123,822,366	4·70
1905	12,581	26,636,211	22,410,000	14,318,982	7,879,218	6,439,764	125,426,123	5·13
1906	13,073	34,198,565	26,716,000	16,403,819	9,749,739	6,654,080	134,337,775	4·95
1907	13,988	41,784,238	27,929,000	17,594,069	10,843,087	6,750,982	157,875,089	4·27
1908	14,994	47,150,384	32,211,000	20,279,560	12,407,320	7,872,240	169,000,000	4·66

The number of railways at present in operation is thirty, this figure including the railways and cable tramways or mechanical traction lines in the country districts, both public and private, as in either case they serve for the transport of produce. Of these thirty lines twenty-seven are worked by private companies and three by the State. The latter are lines of no great value, which the Government has itself constructed, or which it has had to take over, either in the general interest or to redeem their heavy guarantees.

In the matter of comfort the great Argentine railways leave nothing to be desired, and many Europeans, out of touch with the rapid changes of this progressive country, would certainly be much astonished to learn that one may cross the Pampa or reach the foot-hills of the Andes in trains equipped with sleeping-cars and restaurant-cars of the latest type. Perhaps there is rather less ornament and fewer carpets than in the European sleeping-cars, but the same cleanliness will be found, the same service, the same conveniences.

The rolling-stock is also the object of incessant improvements. To give only one example, the Southern Railways Company has placed in service a new type of locomotive, with two pairs of double-expansion cylinders. These engines have ten wheels, of which six are coupled and four mounted in the front on bogies; their maximum power enables them to draw an effective load of 2160 tons up an incline of 1 in 500. As for the goods wagons, their capacity is 40 tons in the broad-gauge lines and 25 tons on the narrow gauge.

According to statistics, on the 1st November 1908, the various railways had in service 2992 locomotives, 2031 passenger-cars, and 33,800 goods wagons or trucks.

The companies are enabled to import free of tariff, during the first ten and sometimes the first twenty years of their tariff, all their fixed and rolling stock; it is thus to their advantage to obtain from abroad the most effective equipment, in order to obtain the greatest possible profit from the governmental favour.

Railways of the Second Class, Steam Tramways, Cable Lines, etc.

I. FOR PUBLIC SERVICE.

	Gauge.	Mileage.	Interest on Capital.
Steam Tramway, Rafaela	1 metre (3 ft. 3·4 in.)	53·40	·79%
Malagueno (connecting with the Central Argentine)	—	—	—
Municipal Tramway of the La Plata Abattoirs	1·435 metres (4 ft. 8½ in.)	14·30	·36
Ocampo Colony	1 metre (3 ft. 3·4 in.)	21·11	—
Florencia to Piracus	1·067 metres (3 ft. 6 in.)	12·42	—
Railways of the Entre prin de Las Catinas	1·676 metres (5 ft. 6 in.)	4·97	3·38
Barranqueras to Resistencia	·75 metres (2 ft. 5·3 in.)	16·76	3·40
Total, ...		122·96	

II. PRIVATE.

Tyrol Harbeur to Lucinda Colony	·6 metres (23·6 in.)	22·36	—
Steam Tramway from Piraguacito to Guillermina	·75 metres (2 ft. 5·5 in.)	53·40	—
Colony of Las Palmas	·6 metres (23·6 in.)	29·20	—
Valdez Peninsula	·76 metres (2 ft. 5·9 in.)	19·87	·58
Total, ...		124·83	

SUMMARY.

	Mileage.
I. State railways	1765
II. Private railways (concessions)	11,245
III. Railways of the second class and steam tramways—	
A. Public	119
B. Private	121
General total, mileage of lines in operation ...	13,250
General total on September 1st	14,994

These lines are of very unequal value from the shareholders' point of view; but it must be recognised that the majority, after various vicissitudes, have of late years shown an increase of revenue that proves their vitality. We may

cite, as example, one of the Southern lines, such as that running to Bahia Blanca *via* Tornquist ; a line built almost at a loss by the Southern Railway Company of Buenos Ayres, but which to-day is yielding over 4 per cent., thanks to the agricultural development which has followed its course. According to figures of reliable origin, the traffic of this line between the stations of General La Madrid and Bahia Blanca, has increased from 63,580 tons in 1888 to 458,750 tons in 1908, or an increase of 620 per cent. in twenty years, and even so these figures do not include the through-goods traffic between these points.

Generally speaking, we may say that the revenues of the Argentine railways more often than otherwise exceed expectation, even in the case of new lines. On the other hand, it is difficult to reduce the expenses of working, on account of the special conditions of the traffic, which is only heavy at the time of harvest, instead of being distributed throughout the year.

We must warn the reader that the summary just given is of only approximate value. To avoid wounding the susceptibilities of the State, or in order not to justify demands on the part of the State for lower tariffs, certain of the railroad companies publish far lower profits than they really make, by means of transforming a portion of their profits to the reserve or redemption accounts. With the same object, they sink considerable sums in land purchase or in permanent-construction work.

Other companies, on the contrary, hoping that the State will eventually take over certain of their lines, seek to augment their returns temporarily, in order to obtain a better sale price.

We may safely say, however, the administrative methods of the greater companies being what they are, that on the whole the average revenues are above rather than below the figures we have given. Accounts are conducted on a basis of very cautious evaluation, in order to lessen the shock of a bad harvest.

As for the tariffs of the various companies, they are still very high, as always happens when there is no competition.

Here are some of the prices of freight per ton, according to the articles and the distance they are carried : *

		Up to 50 kilometres or 30 miles.	300 kilometres or 180 miles.	700 kilometres or 421 miles.
Wheat	...	4s. 9.4d. to 5s. 6.5d.	10s. 11d. to 14s. 9.6d.	14s. 9d. to 17s. 2d.
Wool in bale		5s. 8d. to 12s. 9d.	26s. 3d. to 39s. 11d.	39s. 2d. to 58s. 1d.
Wool in sacks		14s. 11d. to 18s. 3.6d.	47s. 6d. to 58s. 9d.	72s. 3d. to 93s. 3d.

A factor that makes these freights seem even higher is a comparison with the maritime freights, which fell in 1908 to a very low figure. The transport of a ton of cereals to a port of embarkation 3000 miles distant would cost a farmer four or five times as much as the freight from that port to Europe.

In a country like the Argentine, presenting an immense level surface to the eye, which can hardly distinguish the slightest landmark or difference of level, it would seem as though the building of railways should have been particularly inexpensive, especially as for ten to twenty years all materials could be imported free of duty. As a matter of fact, however, the cost of construction has been very high in the case of certain lines ; either on account of the land speculation which has followed their establishment, or because the estimates were exceeded having been established without any serious control on the part of the State. This explains how it is that these companies, having an enormous capital to redeem, cannot at the present moment lower their rates.

In the Argentine the railway companies are not established as in France, by right of a concession limited to a certain number of years.† The concession is granted without conditions, excepting the reserve that it may be redeemed by the State ; and this reserve may be applied at any time

* The Argentine "tonne" weighs 35 lbs. less than the English ton being 1000 kilogrammes, or 2205 lbs. in weight.

† A clause fixing the term of the concession—that is, the date upon which the line, with all its buildings, etc., will pass into the hands of the Government without any payment on the part of the latter, was inserted in the case of two railways only, and for a term of fifty-five years. These two lines are the railway from Villa Mercedes to La Toma (the old North-Western Argentine), to-day a section of the Andean National, and that from San Cristobal to Tucuman, to-day the Southern Section of the Central Northern. Both are guaranteed by the nation ; but the nation having become the proprietor, the above clause has of course not taken effect.

whatever, conformably with the expropriation law. The conditions of redemption are in most cases established on the basis of the revenues of the last five years, increased by 20 per cent., so that the clause can scarcely be carried into effect to the profit of the State in the case of lines yielding good profits.

The State and the Provinces have guaranteed dividends in various ways. These guarantees were granted very liberally when the Argentine was seeking to create and develop its railway system, but the Governments have not shown the same readiness to honour their signatures in times of crisis. We shall see in the financial section of this book that the State has had to contract loans in order to redeem its obligations, and to liberate itself from engagements it had been able to keep.*

At present the Government no longer gives guarantees—not even to encourage the construction of lines in regions which offer little attraction from the point of view of traffic. It prefers to build them itself, in order to increase the extent if not the value, of the systems it already owns; or has recourse to companies or private individuals for the construction of new lines, but without guarantees of any sort.

Having given these details of the railway system, we have still to consider of what expansion it is still capable. In comparison to other American States—excepting the United States, whose colossal progress in this department permits no comparison with other countries—the Argentine is in the first rank in the matter of its railway mileage. With its 13,250 miles in operation on 1st January 1909, it surpasses both Mexico (with 8390 miles) and Brazil (with 10,080), the two American States which, being the wealthiest and having the largest populations, possess very extensive railway systems. If from the same standpoint we then compare the Argentine with France, Italy, Spain, Belgium, England, Germany, and Austria-Hungary, we find that it occupies the fourth rank. But it goes without saying that these figures do not mean anything very precise, except in conjunction with

* The French company of the Santa Fé Railways, which had a guarantee from the Province, which guarantee was never paid, obtained in exchange, by arrangement, the complete ownership of its lines.

those denoting the area and the population of the Argentine. They are indications rather than exact comparisons.

If we compare the number of miles of railway in operation to that of the area in square miles of each country, we shall find that among the nations of South America the first place is no longer held by the Argentine, but by the little Eastern Republic of Uruguay, for in the former country the ratio is only 1.25, while in the second it is 1.67. Mexico ties with the Argentine, with 1.25. Here is an example of the strange conclusions to which statistical inquiry sometimes leads us, since it follows from the preceding figures that Uruguay, with only 1207 miles of railway, and 71,990 square miles of territory, holds apparently, from this standpoint, a higher rank than the Argentine.

The comparison of the mileage of the railways of each country to the number of its inhabitants is an exacter method. We find that for every 10,000 inhabitants the Argentine has 23.59 miles of railway, while Brazil has only 6.49, Uruguay 10.96, Chili 3.98, Mexico 7.12, and Venezuela 3 miles.

All this is explained in the following table, whence interesting deductions may be drawn.

The mileage of railway given for the Argentine should be regarded as provisional, for, unlike those European nations which have almost attained their uttermost expansion and equipment, there is still much to be done in the Argentine before the whole of its territory can be served. Certainly the principal lines are already constructed, but others will assuredly be built, which, apart from their immediate utility, will ultimately pay, owing to the manner in which they will increase the value of the soil which they will traverse.

The constant expansion of its network of railways is for that matter a necessity to the Argentine, as for all new countries, in which there are no roads fit for wheeled traffic. Rather than go to the expense of opening up such roads, which would be an unproductive investment, the Government prefers to favour the creation of lines of railroad which may in time become instruments of production.

Mileage of Railways in the Argentine Republic as compared with other Countries.

COUNTRY.	Area in Square Miles.	Total Number of Inhabitants.	Mileage of Railways in Operation.	Mileage of Railways.	
				Per 100 Square Miles.	Per 10,000 Inhabitants.
Argentine Republic	1,080,460	5,792,807	1908..... 13,740	1.268	23.73
Brazil	3,283,360	16,000,000	1904..... 10,300	.315	6.49
Uruguay	71,960	1,103,040	1904..... 1,207	1.674	10.97
Chili	294,800	3,399,928	1903..... 1,354	.464	3.98
Peru	681,370	4,539,550	1904..... 1,184	.232	2.59
Mexico	749,070	13,607,259	1903..... 9,698	1.263	7.12
Venezuela	362,780	2,619,218	1903..... 523	.143	1.99
Bolivia	482,240	2,180,710	1903..... 701	.148	3.20
Columbia	437,180	4,501,000	1901..... 410	.093	.91
United States	3,726,960	91,794,102	1904..... 213,770	5.882	23.28
France	206,540	39,961,945	1904... .. 27,365	13.735	7.12
Italy	104,060	33,640,710	1903..... 10,016	9.058	2.97
Spain	194,250	19,027,855	1904..... 8,601	4.219	4.51
Belgium	11,330	7,238,622	1905..... 2,853	25.116	3.94
England	121,020	44,587,106	1906..... 23,048	19.009	5.17
Germany	208,180	60,641,278	1905..... 34,103	16.349	5.62
Austria-Hungary	242,820	49,931,906	1905..... 24,288	10.074	4.87

It is true, as we stated in the first edition of this book, that numerous demands for concessions permitting new lines to be built have been presented to and granted by the National Congress. But it is also true that only a very small number of these projects have been realised, as many of these undertakings were unable to find the capital necessary to flotation in the foreign markets; this has been true particularly of the English market.

At the same time, there are among these concessions a few projects which seem to be capable of immediate realisation; these are concessions granted to already existing companies, for the extension of their systems, which have the necessary capital at their disposal.

Among new lines in active construction we must cite that for which the concession was granted to MM. de Bruyn and Otamendi: a narrow-gauge railway in the Province of Buenos Ayres. This concession has been taken over by a French company, and may require a maximum capital of £8,000,000.

This undertaking, which is really the extension into the Province of Buenos Ayres of the network of narrow-gauge lines, exploited by the French company of the Santa Fé Railroads, includes several long lines starting from Rosario, crossing the most productive and thickly-peopled regions of the West, and terminating at the three great centres of export: Buenos Ayres, Bahia Blanca, and La Plata.

This undertaking, which has been well thought out by its promoter and present director, the engineer Girodias, is based upon two ideas; one being to build cross lines connecting the principal railways of the south and the west in agricultural districts where these two lines hold an absolute monopoly; the other is to extend to Buenos Ayres the narrow-gauge system of the north and north-west. This system consists at present of 3444 miles of railways, having their terminus at Rosario; it is therefore most desirable that these lines should be prolonged towards the south, and especially as far as the capital, in order to avoid troublesome transshipments. This will be a great advantage, for example, to the sugar-growing districts of Tucuman.

At the present moment, this new narrow-gauge system is

already working from Rosario to Buenos Ayres, the equipment being excellent, and westward as far as Nuevo de Julio. The first results have confirmed the forecasts as to the development of traffic in this region.

Another concession for a line on the same basis is that obtained by Mr Duncan Munroe, for the establishment of a narrow-gauge railway between Rosario and Buenos Ayres, to be a prolongation of the "Central Córdoba", of which he is the Director. This scheme, thanks to the support given by the "Central Córdoba and the Córdoba and Rosario," has been put into execution, and is on the eve of being opened to the public.

The proposal to unite Rosario and Bahía Blanca—the two chief Argentine ports—by a line crossing the Province of Buenos Ayres in its most fertile region, is also on the way to completion. The construction of this line is being actively pushed, so that it is hoped that the line may be open for service in the course of 1910.

This important line is being built by French capital, the executive being known as the Rosario and Puerto Belgrano Railways Company.

The National Congress has also granted to existing companies, which can offer all requisite guarantees, the authorisation to construct new branch lines, which will attain a total length of 3370 miles, and will absorb a capital of £25,000,000. Of this total, 797 miles will be built by the Western Railways Company, 874 by the Southern Railway Company, 328 by the Pacific Company, 192 by the Central Córdoba, 427 by the Rosario and Puerto Belgrano Railway, 190 by the Province of Buenos Ayres Railways, 87 by the French Company of the Province of Santa Fé Railways, and 476 by the Central Argentine Railway.

Apart from the capital of companies already established in the Argentine, one may already detect a new stream of foreign capital destined to build new railways. It is announced, indeed, that a new railway system, 223 miles in length, will shortly be built in Entre Ríos by German capital, which has hitherto been shy of this kind of undertaking.

The Province of Buenos Ayres also proposes to construct and exploit on its own account a narrow-gauge line running

from La Plata in the direction of the fifth meridian. For this undertaking French capital will also be solicited.

Finally, the National Government, not wishing to remain inactive in the midst of these civilising activities, has just obtained the approval of Congress for a vast scheme of populating the southern territories of the Republic; a scheme initiated by an ex-Minister of Agriculture, Dr Ramos Mexia, the basis of which is the construction of over 1200 miles of railway, along which new centres of colonisation will gradually be formed.

This is the great object of the present Government. It has taken shape in the form of a law, having as its especial object the development of the national Territories, and having regard both to the creation of new railways and the progress of colonisation; problems closely connected where the opening up of a new country is concerned, and value is given to its soil.

The plan adopted by the Government is first of all to build the railway, which is the great instrument of civilisation; then to profit by the increased value which the land will immediately take on along its course, by dividing and selling it with a view to colonisation. The most immediate result of this policy is that the soil, which has hitherto been uncultivated or abandoned, rapidly attains a double or treble value. The same thing happens when irrigation works are carried out, as they may be in certain districts, rendering productive soil that has hitherto been uncultivable for want of water. We may cite the Rio Negro among those Territories in which recent attempts have been made to realise the value of the soil, and towards which the attention of capitalists as well as colonists has lately been directed.

To ensure the carrying-out of these schemes, the State usually has recourse to contractors who accept payment in Government bonds, with a margin of profit sufficient to pay them for their enterprise. We may therefore say that the affair is good for every one, and that it is as much to the advantage of the State as to the profit of the capitalists who take up these proposals.

Finally, if we wish to estimate the probable development of the Argentine railways, basing our figures not on the

concessions granted, which already amount to a length of more than 9000 miles, but on the possibilities of obtaining capital, we may reasonably give 4500 miles as a probable figure of growth. To this figure we must also add that of the lines now under construction, either on behalf of the State or by existing companies, which on the 1st of January 1908 amounted to a total of 4800 miles, of which 973 belonged to the State railways and 3827 to private companies.

We may thus legitimately estimate that in the coming years the Argentine railway system will be increased by some 6200 miles, making a total of nearly 19,000 miles. But to keep to solid fact, we must add that such development depends on continued agricultural prosperity, the rapid increase of ploughed lands, and, above all, on a brisk immigration; for these conditions are indispensable to all fresh progress in the Argentine.

In this large increase of railroad construction we may perceive at the same time the application of a new programme. The State to-day especially favours the construction of a second network of economical railways, running between the broad-gauge lines or even crossing them diagonally—completing them, in fact, and duplicating them. The aim of this policy is not only to respond to the development of traffic caused by abundant harvests, but also to lower freights by the establishment of competition.

As an element of the future railway system of the Argentine, we may also include the lines of communication with Chili, across the Cordillera, so soon as they are open to through traffic. At the present time the Trans-Andean railway on the Argentine side of the range has reached the frontier of Chili at Las Cuevas, 10,000 feet above sea-level; and on the further side the Chilian Government is hastening the work of construction on its own Territory, so that it only remains to complete the two miles of tunnel in order to open the whole line to traffic.* Once in operation, the journey between Valparaiso or Santiago and Buenos Ayres will occupy less than forty hours, while at present, by the sea route, it takes twelve to fifteen days, and involves the difficulties of navigating the Strait of Magellan.

* This line is now open.—[TRANS.]

The line is narrow-gauge, and some $8\frac{1}{2}$ miles of it is worked on the rack and pinion system. The highest point will be about 1480 feet above sea-level, in a tunnel 1.92 miles in length, of which 1.05 miles will be in Argentine and .87 on Chilean territory.

The Southern Railway has also a line which at present runs as far as Neuquen. The Directors of the company have ordered the continuation of this line into Chili, going by way of Antuco, thus establishing a direct route between the south of Chili and the agricultural districts of the Argentine.

Despite the formidable barrier raised by the range of the Andes, the Argentine and Chili, two nations having the same origin, with a common frontier of 3000 miles, are destined, by means of their railways, to an increasing closeness of relation. Chili is a country poor in cereals, and in especial does not raise sufficient cattle for the needs of her population. On the other hand, she produces wines which are highly appreciated in the Argentine. There may thus spring up between the two countries an exchange of products, which the railways will certainly increase, and which will give the Argentine railroad system the benefit of international traffic.

To complete this sketch of the Argentine railways, and of the progress they have realised, we must not fail to speak of the construction of an industrial traffic-way which has established a remarkable record—not only in South America, but over the whole world. We refer to the suspended railway, constructed in the Province of La Rioja under the last Presidency of General Roca, in order to carry down to the plains the produce of the famous Famatina and Mexicana mines.

This suspended way, which is over 21 miles in length, and which cost £76,000, is, in the words of M. Civit, the Minister of Public Works, who inaugurated it, the longest traffic-way of this kind in the two worlds.*

* As for the probable profits of this line, the Minister makes the following statement: "In counting on a minimum traffic of 50 tons a day during nine months in the year—an amount based upon the present yield of the mines—and deducting 50 per cent. of the gross receipts for working expenses—which is a maximum—we find that to obtain 6 per cent. interest on the capital employed, it would be sufficient to receive 3.36 paper piastres, or 7.6 francs (6 shillings .96 pence) per ton of ore, whereas the mining companies with the present resources pay 20 piastres."

"It glides amid the snows and the tempests, crossing abysses thousands of feet in depth, and ending at a height of 15,000 feet. The highest of its towers is as high as the summit of Mont Blanc, and the mines, into whose bowels it enters, will take their place, like those of Rio Tinto and Bilbao, in the commerce of the world, as the agricultural products of the Argentine have already done; thus drawing all eyes to this privileged country, which is set apart for the most brilliant destiny."

If we now consider the part played by the railways in the general development of the Argentine, we are forced to recognise that in a country so essentially agricultural, the railroad is an indispensable auxiliary of production.* The Argentine Republic is a large country, containing 1,155,000 square miles of territory, and is barely peopled by its 6,000,000 inhabitants; it will therefore be understood that instead of following the population, as in Europe, in the Argentine the railway precedes the population. In the Argentine the railway is like a magic talisman, for wherever it goes it entirely transforms the economic and productive conditions of the country.

We have seen that in the matter of transport agriculture will shortly enjoy improved conditions; there will be greater facilities for bringing its products to the ports of embarkation, and placing them in the centres of consumption. But what are these conditions at present? What is the precise relation between the railways and agriculture? Are they sufficient for the rapid transport of the harvests? This inquiry, which is of immediate interest, has been made by M. Emile Lahitte, Director of the Division of Statistics in the Ministry of Agriculture, with his usual competence and practical good sense. We will take certain useful data from this source, without prejudice to other data which we have collected, while profiting by the experience of other personalities equally well informed.

One of the most characteristic peculiarities of agricultural

* Among matters still under consideration in the Argentine, we may mention the concession for the port and railway of Samborombon, which would connect with a system of narrow-gauge railways leaving Samborombon, which would be a great Atlantic port, and running to the end of the Territory of Pampa Central, thus facilitating the export of its products

production in the Argentine is the fact that, conversely to the production of the United States, about 80 per cent. of the harvest, and perhaps even more, goes to fill foreign markets, leaving only 20 per cent. for home consumption; and not only is it necessary to export this surplus, but it has to be exported with as little delay as possible. In the United States the annual cereal harvest amounts to about 4000 millions of bushels, of which scarcely 10 per cent. or 12 per cent. are destined for export. The rest remains in the granaries, and is manipulated, during the rest of the year, in response to the needs of a population of 80 million inhabitants. But in the Argentine, supposing the harvest of wheat, flax, and maize to amount to 400 million bushels, one might count upon the exportation of 320 millions, the 80 millions remaining for home consumption.

From the commercial point of view, agricultural production thus depends chiefly on the importing markets. This is so far the case that if we look into the monthly figures of exportation, remembering that threshing begins at the end of December and continues sometimes into March or April, we shall find that by June three-quarters of the year's export has already been shipped. The exportation of wheat in 1907 amounted to 100 million bushels, and by the end of June 79 million bushels, or 79 per cent., had already been shipped. The quantity of maize exported during the same year was 48 million bushels, and in October, that is, five months after the harvest, 40 millions had already been shipped; that is, 84 per cent. The statistics of the carriage of cereals by railroad also clearly prove the pressure and congestion existing in the months following the harvest.

From this peculiarity it follows that there is always a struggle latent between the exporters of agricultural produce and the transport companies. In some cases, as in 1905, this struggle took the form of judicial protest; the chief export houses sued the "Great Southern of Buenos Ayres" for damages in respect of unjustifiable delay in the transport of cereals.

It must be admitted, however, that the railway companies are not always the cause of such delays in export; there are other factors also which we must take into account and consider in relation to the national production.

One of the elements which influence the regularity of transport is the amount of cargo-room available at the ports. When there are many steamers and sailing-ships in port the shipping rates fall; the exporters hurry to make contracts with the shipping lines, and in order to be in time to avoid surcharges, they demand a large number of goods wagons of the railways, which the latter naturally cannot always produce. The law states that the railway companies must maintain a goods service equal to the normal demands of the traffic; and the demands created by the accidental causes we have mentioned are not normal.

On the other hand, if the shipping contracts are high, or the prices in the consumers' market low, the buyers will be unwilling to despatch their cereals to the ports of embarkation, and the railway companies can do nothing to clear their stations of large quantities of accumulated grain, which they cannot forward, since the buyers will not give the order for their despatch.

During a recent harvest both these phenomena were observed; on the Southern Railway the harvest was abundant in quantity and good in quality, but only a small number of steamers were lying in the terminal port (Engineer White Harbour); every exporter in the district wanted to ship at once, but the railway could carry only what it was capable of carrying in a normal period.

It was another affair in the districts served by the Central Argentine and the Buenos Ayres and Rosario Railways. Here the wheat was scanty and of poor quality, and the buyers had sent very little to their port of embarkation—Rosario. They preferred to send their purchases to the grain-elevators of Buenos Ayres, where, by means of blending the central with the southern wheat, a special grade of flour was produced, superior to that produced in the districts served by the above two companies.

The best solution of this question of the responsibility of the railway companies toward the despatchers would be a rule that the railways should be obliged to despatch in the course of a day only the amount of produce sent to the stations during the same lapse of time. But the exporters are generally Argentines, while the railways are usually in

foreign hands; so that this solution, though equitable, would not be regarded with much favour, and it is probable that the railway companies will be called upon to remedy this situation, so unfavourable to Argentine commerce, at their own cost.

Let us now see how far the railways have responded to the increase of agricultural productions.

According to the official statistics, in 1895 the Argentine Republic contained 8760 miles of railways, and the merchandise transported by the various railway companies during that year amounted to 9,811,100 tons. In 1907 the railway systems had increased to a total length of 14,000 miles, while the produce carried during the preceding year amounted to 28,394,500 tons. These figures represent an increase of rather more than 59 per cent. in railway mileage, while the transports had nearly trebled in twenty years.

According to the same authorities, between 1897 and the end of 1907 the rolling stock and the capacity of the goods cars increased in the following proportions:—

Year.					Number of Cars.	Capacity in Tons.
1899	...	...	...	...	32,897	369,764
1900	...	...	...	...	34,118	398,736
1901	...	...	...	...	35,503	432,342
1902	...	...	...	...	36,288	466,667
1903	...	...	...	...	36,334	480,498
1904	...	...	...	...	38,724	570,600
1905	...	...	...	...	42,623	688,308
1906	...	...	...	...	48,840	878,886
1907	...	...	...	...	52,405	1,029,122

From these figures we obtain the increase in the number of cars of produce and their contents in tons; but it is more to the point to know how their rolling-stock is utilised. According to M. Lahitte, the normal distance travelled by a goods car is 6210 miles in a year; but to judge by the statistics its actual record is always in excess of this figure, since in 1902 the distance travelled exceeded 8910 miles per car. It is evident, therefore, that the rolling-stock has been run to its utmost capacity; but it is also evident that in practice the cars have not been loaded to their utmost capacity, as the normal load is 4.37 tons per car, while the average load actually carried has been hardly 1.70 tons.

It follows accordingly that, in spite of the distance travelled per car, the companies have only profited to the extent of 39 per cent. of the capacity of their rolling-stock ; but we must not forget that there is always a difference between theoretical capacity and effective capacity, which varies according to the nature of the load. This fact is further explained when we add, as we must, that out of a hundred cars sixty-nine make the journey loaded while thirty-one go or return as "empties."

We see from these data that although the Argentine railways possess more than enough rolling-stock for the rapid transport of all agricultural products to their ports of embarkation or destination, yet in practice, on account of the abnormal character of the traffic, the railways only very imperfectly perform the services which they ought to perform, while the fault can hardly be imputed to them.

But this trouble will disappear as soon as the large buyers of cereals, in place of expecting everything from the railway companies in the matter of rapid transport, while they themselves wait to despatch their crops until the international prices are favourable, finally decide to build the granaries and warehouses which they now demand of the railway companies. To simplify the task of these companies, elevators should be erected at the stations which serve the important agricultural zones, so that the cereals could be graded before loading them on special cars, which would then transport them to the elevators of the principal ports, whence they would glide into the holds of vessels specially prepared for the trade. But all this would require materials and plant which the country does not so far possess ; yet with the rapid agricultural progress of the Argentine, the plan should be easy of accomplishment.

As will be seen by the data we have given, the method of despatch is quite unlike that practised abroad. While in Europe the railway depôts only receive goods for immediate transit, the Argentine grain-merchant expects the depôt to serve him for a warehouse until the moment he receives a telegram and requires the railway to transport to the port of embarkation, without delay, the large quantities of grain accumulated at the stations.

CHAPTER III

IMMIGRATION AND COLONISATION

Immigration is a vital problem for the Argentine—Table of the population per Province and per Territory. Its sparsity—The exceptional situation of the Argentine as the objective of European emigration—The poor results hitherto obtained through default of colonisation—The faulty division of the public lands—History of immigration in relation to colonisation—The nationality of immigrants.

THE economic and financial organisation of the Argentine being now assured, and peace without and within being established, while at the same time the revolutionary spirit of the bad old days has gradually disappeared, the great problems which the country has to face to-day are principally those dealing with the development of agricultural and industrial production and its outlets.

But among these problems none is more vital to the future of the Argentine than the problem of filling the vast gaps of empty territory with new elements of population.

Here, according to the last official data, are the figures relating to the distribution of the population in the Provinces and National Territories :—

					Area in sq. miles	Population in 1908
Province of Buenos Ayres and Capital	...	...	...	...	117,563	2,427,628
„ „ Santa Fé	...	...	...	...	50,784	772,410
„ „ Córdoba	...	...	...	...	62,000	477,680
„ „ Entre Rios	...	...	...	...	28,709	599,333
„ „ Corrientes	...	...	...	...	32,494	317,247
„ „ Tucuman	...	...	...	...	8,903	280,311
„ „ Santiago de l'Estero	...	...	...	...	39,660	192,039
„ „ Mendoza	..	...	...	...	56,350	174,019
„ „ Salta	..	...	...	...	62,040	141,610
„ „ Catamarca	...	...	...	...	48,408	103,680
„ „ San Juan	...	...	...	...	33,630	105,684
„ „ San Luis	...	...	...	...	28,460	103,367
„ „ La Rioja	...	...	...	..	34,450	86,352
„ „ Jujuy	...	...	...	...	18,930	56,945
Carry forward,					622,381	5,328,907

Brought forward,					Area in sq. miles	Population in 1908
					622,381	5,328,907
Territory of the Pampa	...	...	...	...	56,170	51,673
„ „ Misiones	...	...	...	...	8,590	38,748
„ „ Neuquen	...	...	...	...	42,235	18,020
„ „ Rio Negro...	...	...	...	...	75,726	15,961
„ „ Chaco	...	...	...	...	52,604	13,838
„ „ Formosa	...	...	...	...	41,294	6,309
„ „ Chubut	...	...	...	...	92,680	5,244
„ „ Santa Cruz	...	...	...	...	107,860	1,742
„ „ Les Andes	...	...	...	...	24,986	1,245
„ „ Tierra del Fuego	...	...	...	...	8,277	1,222
					1,137,803	5,792,807

The above figures prove more eloquently than any other argument that the supreme necessity of the Argentine people at the present time is an increase of population. The territory of the Republic has an area of more than 1,130,000 square miles, and its population amounts to no more than 5,792,807, which gives a density of 5·1 persons per square mile. One should also recollect, in order to grasp the true significance of these figures, that of those 5,792,807 inhabitants, 157,963 inhabit the 43,000 acres which form the site of Buenos Ayres; so that only 4,634,844 remain to people the rest of the country, a fact which still further lessens the density of the population.

This density varies in different regions and in different Provinces; thus the eastern or coastal region, formed by the Federal Capital and the Provinces of Buenos Ayres, Santa Fé, Entre Rios, and Corrientes, has 17·08 inhabitants to the square mile, while that of the centre, which comprises Córdoba, San Luis, and Santiago de l'Estero, has only 5·8. As we penetrate further inland the density grows still less, until in the western or Andean region, formed by the Provinces of Mendoza, San Juan, La Rioja, and Catamarca, the figure is barely 2·7. In the northern region, embracing the Provinces of Tucuman, Salta, and Jujuy, there are 5·23 inhabitants per square mile.

But it is in the National Territories—in one of which more than one important European people could find room to spare—that we find the lowest density. There the desert reigns in all its desolation. The Territory of El Pampa, whence so much wealth has been drawn of late years, and

whose area is 56,200 square miles, contains barely 52,000 inhabitants; that of Rio Negro, whose area is 45,600 square miles, contains but 16,000, while in the Territory of Santa Cruz, situated on the shores of the Atlantic, in which there are important ranches, and which might contain a numerous pastoral and maritime population, there are only 1742 souls to its 58,890 square miles. All these figures prove that the Argentine is, without metaphor, a desert nation, and that for the present and for a long time to come, its peopling will constitute its great national need.

To this affirmation we must add another no less certain: that in the normal order of human events, and in accordance with the economic and sociological laws that govern European nations, there is no country in the world which assures the labourer who establishes himself upon its soil of such perspectives of wealth and welfare. All things compete to make it a paradise of immigration: the softness and variety of its climate, the richness of its soil, the extent of its territory, the enormous inland waterways which cross it, and the facilities of communication with the European consumers of its produce, with whom the Argentine is connected by one of the most reliable ocean traffic-ways in the world.*

The United States, which have hitherto been the objective and centre of attraction to which men of initiative have converged from all parts of the world, are beginning to experience all the troubles familiar to European nations as the result of an excessive population.† It is for this reason

* The distance of nearly 7200 miles from Buenos Ayres to the French ports is crossed by the great transatlantic liners in from eighteen to twenty-one days. The Argentine Parliament has voted a law authorising the Government to give a subsidy of £400 monthly to any company adopting the refrigerator system and undertaking to make the voyage to Lisbon or Vigo in fifteen days.

† The population of the United States is hardly yet excessive; the country is very much more than self-supporting, and many States and Territories are sparsely settled. The real source of trouble is that many of the national resources are locked up in the hands of Trusts or private owners; and the effect of railway combinations and of produce trusts all over the country is resulting in a state of affairs similar to that produced by a lack of communications and also an effect similar to that of over-population. It is obvious that both causes make for emigration, as the English immigrant in Canada, who finds all the best locations occupied by Americans, has cause to know.—[TRANS.]

that they are striving, by all the means in their power, to restrain the stream of immigration that pours upon their shores.

Australia, which was also only recently one of the great centres of immigration, has during these last few years suffered terrible economic shocks, of which the effect has been to divert the stream of new arrivals.* Moreover, as a rival of the Argentine, Australia has two causes of inferiority : her rigorous climate, which exposes the country to violent extremes of temperature, passing from intolerable heat to a bitter cold, and, on the other hand, a distance from the European countries to which she exports her products double that between the banks of the Plata and Europe.

Having thus made it clear that the Argentine Republic is in an exceptional position to attract and to support a large European population, the time has come to measure the distance travelled, and to note the progress realised, so that we may see whether the results obtained are in proportion to the perfect adaptation of the soil to immigration.

Without being too pessimistic, we are forced to recognise that all efforts hitherto made by the Argentine to increase its population have hitherto remained without appreciable effect.†

Colonisation, that is, the peopling of the country, was inaugurated in the Argentine by the initiator of all true progress — Rivadavia — who founded the first colony of Santa Catalina. This work was intelligently and enthusiastically continued by Mitre and Rawson, in 1863 : it was then vigorously pushed by Sarmiento during his extremely progressive administration ; but as a matter of fact, in spite of all these efforts, colonisation has not given

* Here again the trouble is partly due to the back-blocks being taken up by large settlers, and still insufficient means of transit.—[TRANS.]

† It is one of the disadvantages of immigration from a very poor country where there is no political oppression, that immigrants will return to it, after saving money in a country where money is cheap and the standard of living higher, as the work of a few years will establish them comfortably in their native country. This is especially true of Italian emigrants. The evil will doubtless be overcome by a measure comparable to the "Homestead Act" of the United States, in conjunction with national loans of capital or of farms as going concerns, to be bought by payment at a low interest, which would result in a population of peasant owners in comfortable circumstances.—[TRANS.]

the results that were expected of it. To explain this lack of success, we must suppose that the work has not been promoted according to the indications of science and experience, and that a variety of events, uncontrollable by the human will, has thwarted the praiseworthy intentions of the Government. Otherwise it is impossible to account for the fact that the Republic contains less than 6 million inhabitants, whereas its soil would support 100 millions.

To attain the primordial object of peopling the country, the Argentine has had at its disposal, among others, one very important means—the public lands—a means which other nations in similar circumstances have employed with excellent results, but which in this case has unhappily not produced the same happy effect, being manipulated by inexperienced or thoughtless hands.

Various laws have been voted in the Argentine, tending to augment the population by means of colonisation. All systems have been tried successively, and one and all have failed. "This failure," says M. Eleodore Lobos, in an extremely instructive volume published under the modest title, "*Notes on the Land Laws*" (*Annotations sur la législation des terres*), "is an incontestable fact, and must be attributed not only to economic, administrative, and political conditions, but also to the freedom with which the soil has been divided into lots of enormous area, and the obstacles opposed to the easy and secure acquisition of small properties. In other terms, our politicians have effected the very reverse of a rational colonisation, and have established a system of large properties instead of subdividing the land between the colonists according to their productive capacities.

This error was recognised by the Government more than fifteen years ago; but the influence of speculators, who profit from this short-sighted policy, has been more powerful than all attempts at reform.

"To understand the matter," says the same author, "we have only to see with what indifference to the public weal the executive, during the last twenty-five years, has disposed of 67,817,000 acres of uncultivated soil, which formed part of the national domain. The laws voted were impotent to prevent the disposal of these public lands in large parcels,

so that the disposal of these lands failed to draw the population which these vast domains could support."

The real beginning of Argentine immigration was when the tyranny of Rozas was overthrown on the 3rd of February, 1852, and a regular Government established, which voted a fundamental law of which the object was "to cherish the general welfare, and to secure the advantages of liberty to every citizen, to posterity, and to all people of the earth who desire to live on Argentine soil." From this moment a powerful current of European immigration set in; turned aside from time to time by financial crises, plagues,* and war; but never completely arrested. Industry, commerce, and agriculture, which had so far slumbered, received a considerable stimulus from this new source. In a single year more immigrants entered by the port of Buenos Ayres than had for many years entered the whole country.

The public administration did not take the trouble to keep an exact record of the number of immigrants before the year 1853; and between 1854 and 1870 we have simply the number of new arrivals, without any further details. Only since 1870 have the official statistics classed the immigrants according to nationality, and only since 1881 have they recorded other details, such as sex, age, profession, education, etc.

During the last six months of 1854, 2524 persons entered the country; in 1855, 5912; in 1856, 4672; in 1857, 4951, in 1858, 4658; and in 1859, 4735; or 27,452 in six years: that is, far more than had entered during two centuries of colonial life.

In the decade formed by the years 1860-1869, the number of immigrants increased to 134,325; in the years 1870-1879, to 264,869; but the highest figures, no less than 1,020,907, were reached between 1880 and 1889. But we must confess that during this decade certain artificial means were employed to recruit the population in Europe; such means as gratuitous passages, which brought to the Argentine a number of useless people, unfitted for any productive task whatever.

* The term used, *fléaux*, would probably include yellow fever, drought, locusts, cattle disease, bad harvests, etc., etc.—[TRANS.]

During the following decade, 1890-1899, which saw the terrible banking smash and the loss of public credit, as a result of every kind of excess, the immigration diminished slightly—to 928,000 persons—and at certain moments emigration also made itself felt, in such proportions that it amounted to a veritable exodus. The departure of those who failed to make money in the Argentine or find the work they sought amounted to 552,172, the largest figures that have so far been recorded.

Unhappily this double stream of immigration and emigration has continued up to the present. Thus, in 1900-1904, 601,682 immigrants entered the country; but, on the other hand, 384,000 emigrants left it. Such figures as these denote a grave disorder in the assimilative faculty of a nation. Matters were no better in the three years 1905-1907, since although 781,796 immigrants entered from Europe and from Montevideo, 324,687 emigrants left during the same period, leaving a total of only 457,108 in three years.

In the previous period, from 1900-1904, the diminution of the current of immigration was explained by various causes: in the first place, by bad harvests, the suspension of important public and private undertakings, the fear of war over the frontier question, the dearness of living, the difficulties experienced by the immigrant in settling in the national or private colonies: the excessive price of land and the high rents in the more promising agricultural districts, the insecurity of life for man and beast, the abuses of the authorities, especially in districts remote from the centres of population, and the tardy, costly, and faulty nature of justice.

But since this period many of these causes have disappeared, thanks to the splendid harvests of the last few years, and to the period of rapid economic expansion upon which the Republic has entered. It is difficult, under these conditions, to explain the still existing lack of immigration, which denotes a disorder of the assimilative faculties of the country.

Among the causes likely to prevent immigration there is one which must not be too closely insisted upon: the increasing cost of living. But it is the European mode of

life that is dear, while in the country districts existence costs next to nothing, as the colonist himself produces practically every alimentary necessity.

We must also note that every year numbers of harvesters arrive from Europe, earn good wages, save money, and return to their native countries directly after the harvest.

In 1905, 1906 and 1907 the migratory movement was represented, as we have seen, by 781,795 immigrants and 324,687 emigrants. If we allow that each of these latter took away with him a sum of £30, as the Department of Immigration has calculated, it follows that from this cause alone nearly £10,000,000 left the country during this period of three years.

Here are some figures taken from an official publication dealing with the migratory movement, which relate both to immigration and emigration, and show which European countries have chiefly contributed to the current of immigration. Italy and Spain, as will be seen, furnish the greatest number of immigrants.

Immigration and Emigration.

Year.		Immigrants.	Emigrants.	Excess in favour of Immigration.
1904	... ..	125,567	38,923	86,644
1905	... ..	177,117	42,869	134,248
1906	... ..	252,536	60,124	192,412
1907	... ..	209,103	90,190	118,913
1908	... ..	255,710	85,412	170,298

Immigration from 1857 to 1908.

Italians	... ..	...	...	...	...	1,799,423
Spaniards	... ..	...	...	...	...	795,243
French	... ..	...	...	...	...	188,316
English	... ..	...	...	...	...	42,765
Austro-Hungarians	... ..	...	...	...	...	59,800
Germans	... ..	...	...	...	...	40,655
Swiss	... ..	...	...	...	...	28,344
Belgians	... ..	...	...	...	...	20,668
Other Nationalities	... ..	...	...	...	...	203,242
Total						3,178,456

As we have already observed, one of the causes which impede emigration is to be found in the faulty distribution of the soil, the obstacles which the agricultural immigrant

has to surmount before he can become the proprietor of even a scrap of ground; and in the lack of serious attempts at colonisation, which would provide the cultivator with the means of working his holding and finally of becoming its proprietor. "How many immigrants," says Señor Girola, "coming to this country with the idea of buying a little piece of land, have been forced to abandon their dream, on account of the difficulties put in the way of their obtaining the desired holding!"*

Far from encouraging the promotion of a class of small land-owners, the State has assisted in the establishment of enormous holdings, which are the chief obstacle to the peopling of the country. In place of dividing into small allotments, accessible to modest fortunes, the great stretches of land near the railways or the ports, and offering them for sale at low prices in the European communities from which a number of immigrants come each year, as is done by the United States, Australia, and Canada, the Argentine administration has subjected all the operations of purchase to long and wearisome formalities which quickly exhaust both the savings and the patience of the purchaser.

Argentina, then, if she wishes to solve this vital problem of colonisation, which is for her the problem of immigration, must give careful thought to the adoption of some well-devised scheme, with the object of subdividing the present great parcels of land, and of attaching the agriculturalist to the land he tills, by allowing him to become its owner. Without this necessary reform, the country will continue to experience the phenomenon of temporary immigration; the immigration of men who return to their own countries as soon as they have been able to save a little money: a process exceedingly prejudicial to the best interests of the country.

* *Investigacion agricola*, 1904, Carlos D. Girola.

PART II

THE ARGENTINE AS AN AGRICULTURAL
COUNTRY

CHAPTER I

AGRICULTURE

NATURAL CONDITIONS—THE CONSTITUTION OF PROPERTY—The three principal agricultural districts—The northern, central, and southern districts—The division of crops and their varieties.

The constitution of rural property—The division of property—The great estates, called “estancias,” and their dimensions.

The drawbacks of large properties—The necessity of a better subdivision of the public lands—The division into lots of large tracts of land, in order to encourage colonisation—The system of exploiting property.

AGRICULTURAL PRODUCTION—Progress realised in the last seventeen years—Comparative yield of the chief products, wheat, flax, and maize—Lucerne; the importance of the crop and the excellent results obtained.

Increase of the area under seed—The total area cultivated in the agricultural years 1908-1909—The great agricultural belts.

The Province of Buenos Ayres, its agricultural development and its crops—The Province of Santa Fé—The Province of Córdoba—The Territory of the Pampa Central.

Agricultural machinery, its importation from abroad, and especially from the United States.

THE AGRICULTURAL YIELD—The yield of the soil in the different Provinces—Exceptional results in certain districts—Detailed calculation of the yield of a wheat farm—Two instances of great wealth realised by immigrants into the Argentine.

Natural Conditions—The Constitution of Property.

THE Argentine Republic, which we are now about to consider from the geological and hydrographical point of view, offers, by the mere fact of its physical constitution, an immense future for agriculture on the largest possible scale, and at the same time for stock-raising and the rural industries.

We find that the country contains three principal agricultural regions: (1) the region to the north of the provinces of Santa Fé and Entre Rios; (2) the central region which runs southward from the limits of the northern, as far as the south of the Province of Buenos Ayres and the Territory of La Pampa, including a portion of the Territories of Rio Negro and Neuquen; (3) the southern region, which runs

southward from the limits of the central region, down to Tierra del Fuego.

The first region is characterised by a hot climate, with regular rains in the eastern parts; in the west the rainfall is less frequent. The central region enjoys a temperate climate; there, as in the northern region, the rains are regularly distributed in the eastern parts, but are very rare in the west, which is subject to long periods of drought. In the southern region the rains are less frequent and the climate is more severe, with the exception of the west and the extreme south, which are also in a rainy belt.

After long experience a kind of natural selection has come into operation with regard to agriculture; the various crops are to-day distributed nearly as follows: Cereals, such as wheat, barley, oats, maize, and millet,* are cultivated more especially in the region formed by the Provinces of Buenos Ayres, Santa Fé, Entre Rios, Córdoba, and the Territory of the Pampa, which latter is *par excellence* the cereal-growing district. Maize, however, is grown over a still wider region; it is cultivated with success in the whole of the central and northern regions of the Republic. Rice can also be grown in these regions; its culture is being developed in the Provinces of Tucuman, San Juan, Mendoza, Salta, La Rioja, and Jujuy, and also in Corrientès, Formosa, Chaco and Misionès. The Provinces of Santa Fé, Entre Rios, and Buenos Ayres are also capable of producing rice.†

Oleaginous plants, such as the castor-oil plant, sesame, and the poppy, find favourable conditions of growth in the north, while linseed,‡ colza, and rape prosper in the cereal districts.

The sugar-cane is cultivated in the northern region, but

* Millet is an article of diet among the Latins of Southern Europe. The ordinary "minestra" or soup of the Italian wayside *albergo* consists, to English eyes, of a pint of hot water poured over a cup of bird-seed. Pounded, it makes a kind of cake or bread; when boiled it swells slightly and is partly digested. —[TRANS.]

† *Investigación agrícola*, by Carlos D. Girola, 1904.

‡ It should perhaps be stated that the flax or linen plant (Fr. *lin*) so often mentioned in this book, produces not only the flax or linen fibre of commerce, but also linseed, with its valuable products, oil-cake and linseed-oil; the first used for fattening cattle, the second for paints, varnishes, oilskins, and "inlaid linoleums," as well as the basis or "skrim" of ordinary oilcloth. —[TRANS.]

especially in Tucuman, in part of Santiago de l'Estero, Salta, Jujuy, and Corrientès, and in the north of Santa Fé, Formosa, Chaco and Misionès.

The vine is cultivated chiefly in Mendoza and San Juan, where the conditions of soil and climate are favourable, and where it is methodically irrigated by the canals which water the whole of the vine-growing districts ; but the wine and the dessert grape can be grown in the whole of the central region. It also prospers in La Rioja, Catamarca, Salta, and Entre Rios.

Stock-raising is followed especially in the Provinces of Buenos Ayres, Santa Fé, and Entre Rios, and in the south of the Province of Córdoba ; and in a great part of the Pampa Central.

The principal characteristics of Argentine agriculture having been considered, we must now inquire how rural property is constituted ; that is, among how many proprietors or tenants the 35,000,000 acres under cultivation at the end of 1908 are shared.

In the United States, for example, we know by the census of 1900 that the 840,000,000 acres given over to agriculture are divided into 5,739,657 distinct holdings, giving an average of about 142 acres per holding. In France, according to the statistics for 1892, 11,250,000 acres were divided into 5,702,000 holdings, the average extent being about 21 acres.

Is it possible to obtain similar figures for the Argentine ? The national census of 1895 gives us certain data respecting the division of rural property in this country. The 172,000 holdings, agricultural or pastoral, which were included in this census, had an area of 20,295,000 acres, according to the declarations of the owners ; and comparing this figure with the area actually under cultivation, amounting to 12,800,000 acres, we find that only about the half of these holdings is tilled and sown, the rest being left as pasture.

This census also took note of the area of each agricultural holding, and although the result of this inquiry has not been published, a simple division of the number of acres by that of the holdings gives us an average of 118 to 123 acres per holding ; a figure that would be satisfactory enough, if it came anywhere near the reality.*

* Cf. *Censo Nacional*, vol. ii. p. xli.

The national inventory gives only these data in respect of this subject. As we see, they are far from complete; but even if they were, the progress of agriculture during the last few years has been so great that to-day they would only possess a purely historical interest.

Happily the agricultural census (including a census of stock), which was taken during the first half of May 1908 throughout the whole Republic, gives us some valuable information on this head.

This inquiry affected 222,174 holdings, agricultural or pastoral, which had a total area of 450,000 square miles, the area of the Republic being 1,134,700 square miles. This is how these 222,174 holdings are divided:—

There are 53,954 holdings measuring from 27·2 to 123·4 acres; 48,323 of less than 25 acres; 46,553 of from 250 to 740 acres; 29,624 of from 125 to 247 acres; 12,992 of from 743·5 to 1234 acres; 11,104 of from 1236 to 2470 acres; 2968 of from 2970 to 9260 acres; 2052 of from 9260 to 12,350 acres; 1157 of from 12,350 to 24,680 acres. Holdings of more than 24,680 acres are relatively rare, in comparison with the rest; 423 have an area of from 24,680 to 30,870 acres; 781 of from 30,870 to 61,750 acres; 168 of from 61,750 to 114,250 acres; 65 of from 114,250 to 123,440 acres, and finally there are 104 holdings of more than 123,440 acres.

These figures, compared with those of the census of 1895, reveal the fact that in thirteen years the number of rural holdings has increased by 50,174, and that the area given over to the two forms of usage, which lie at the base of the wealth of the Republic, has increased by 276,760,000 acres.

But in spite of this extraordinary development during the last few years, from the point of view of the distribution of the soil, the Argentine is still in a primitive, indeed, almost in a feudal state, by reason of the enormous tracts of lands which are monopolised by a small number of owners. These owners utilise their enormous properties in raising cattle on the great ranches known as "estancias," or employ them for agricultural purposes, when they do not prefer to leave them in a waste and unproductive condition, waiting until time and economic progress shall give them a value which their own efforts are incapable of giving them.

These "estancias"—that is to say, the most usual system of utilising the soil—vary in area from 12,000 to 180,000 or 200,000 acres; some are even over 330,000 acres in extent. Many of them are only a few hours distant from the city of Buenos Ayres, or border on the outskirts of important urban centres.

Such tracts of land given over to stock-raising and owned by private individuals would be inconceivable in most European countries, where private holdings are small; nor are they much more usual in a new country of vast area, like the United States, where more than half the cultivated lands are divided into farms of less than 100 acres each, and where holdings of more than 1000 acres, whether under seed or in pasture, are the exception, the average of all properties and holdings being 143 acres.

It is easy to understand, without a lengthy demonstration, how far this state of affairs goes to retard the general development of the country. It is equally easy to understand that in order to stimulate this development it is necessary before all else to secure an increased foreign population, by attracting it through the powerful bait of landed property.

The great obstacle in the way of the agricultural development of the Argentine arises essentially from the faulty property system; from the fact that enormous tracts of land are held by a few men; from the establishment, in short, of the most odious system of *latifundia* ever known. This trouble arises from the lack of foresight with which the State has parted with enormous tracts of land, which have passed into the hands of speculators or large land-owners, who have left them untouched, while waiting for the value of their holdings to rise.

In the national territories, according to the deputy Joachim Castellanos, who is busily fighting the system of *latifundia*, there are belts of land, now private property, which are divided in the following proportions: 2,470,000 acres into holdings of from 25 to 99,000 acres each; 7,400,000 acres into holdings of from 99,000 to 198,000 acres each; and 7,934,000 acres into properties of 190,000 or 200,000, and over. This means that there are 17,280,000 acres of useful

and cultivable land, in the hands of unenterprising capitalists remaining, unproductive, used to increase neither the population nor the production of the country.*

The principal author of this deep-rooted evil is incontestably the Argentine State, which has squandered its rich inheritance, by allowing it to pass into the hands of speculators, instead of dividing it equitably among the new colonists. The subdivision of these great tracts of land, now concentrated in the hands of a few large proprietors, is, to-day, one of the necessary conditions of the development of the country, and it is with reason that influential voices are raising themselves, in Parliament and in the Press, to proclaim this economic truth.

The great "estancias" of 180 square miles in area, covered by immense herds of cattle, must finally, says M. F. Segni, author of an *Investigacion agricola*, be divided into small concerns of from 4000 to 12,000 acres, which would, with fewer animals but a better system, yield a greater profit both to the owner and to the country. The old system of large ranching must gradually give way to an intensive system, when stock-raising, combined with agriculture, will employ a larger population, attract more capital, and realise better results.

There is happily no need to be greatly pessimistic on this point, as we can already perceive a tendency to the subdivision of property, which comes from the powers of the State as well as from land-owners or commercial companies. Thus the land law of 1907 was passed solely with the object of preventing large monopolies; it prohibits the acquisition for the benefit of a single person of any portion of the national domains of greater area than 6170 acres. The importance of this step will be understood, when we remember that the State has still to dispose of 212 millions of acres of desert land, suitable for agriculture, and situated in territories which are rapidly becoming peopled.

On the other hand, there are certain business concerns which, as owners of enormous tracts of land, are dividing them into small lots, which they are offering freehold to prospective farmers at fairly moderate prices, and facilities

* Speech delivered on 21st September 1903.

of payment are offered at the same time. Among these firms we may mention the "Sociedad Anonima la Curumalan," owning some 600,000 acres of land in the southern portion of the Province of Buenos Ayres, suitable both for cattle-raising and for agriculture, which is selling land at from £2, 2s. to £3 per acre, according to the quality and the situation, payable in three or four years; the payment by instalments being increased by an interest varying from 7 to 9 per cent. yearly. The "Stroeder Colonisation Society," which has exploited a large belt of agricultural country; the "Compania de Colonisation del Rio de la Plata;" the "Estancia y Colonia Trenel," founded by the great Argentine land-owner, Antonio Devoto, and a large number of other companies and syndicates are working on the basis of enabling the colonist to acquire his own land, and are doing successful business.

A striking example of progress in this matter of the subdivision of property is furnished by the statistics of the Province of Córdoba for the years between 1898-1899 and 1905-1906. During this period 3,193,600 acres of land, out of a total of 9,823,300 acres, which represent the colonies and settled land of the province, have been sold to farmers; that is, nearly a third. Thanks to this subdivision, the number of colonists in this province who have become the actual proprietors of larger or smaller holdings has risen to 4568. What is happening in Córdoba is also happening more or less rapidly in the other agricultural provinces; and it is by this method that the Argentine will one day succeed in abolishing the *latifundia*, whose progressive disappearance is a condition of further development.

We might multiply the instances of land-owners or commercial enterprises which are helping the labourer to buy land, for the system of dividing the land into small allotments, selling it at a cheap price, and allowing payment by instalments, is every day becoming more widespread. The journals are full of announcements of the sale by auction of lands which, until to-day, have never felt the ploughshare, and are now given over to colonisation. One also hears men speak, as of an accomplished fact, of the method initiated by several railway-companies which propose,

by means of their own capital, to bring into the market and increase the value of the vast tracts of uncultivated land which they own on the outskirts of their systems.

Unhappily, in spite of this tendency to the subdivision of the soil, the most usual system of working the land is still that of letting it at a fixed rent, or for a certain proportion of the yield in place of rent, or by a profit-sharing system, under which the tenant receives 50, 40, or 30 per cent. of the harvest. The large land-owners, who are the most numerous, prefer the former method, and often impose on the farmer the obligation of leaving a crop of lucerne on the land in the last year of the tenancy.

The chief drawback of this system is that the labourer never becomes the owner of the soil he cultivates, so that he is not actuated by the powerful ties of property, which should attach him to the country and its destinies. On the other hand, too, the tenant tries to obtain from the soil the largest profit he can, without troubling to consider whether he is exhausting it or not; he leaves not even a tree behind him as a monument of his tenancy. But in spite of all these drawbacks this system does furnish the colonist with means to buy land cheaply later on, and in another district. Such is the history of many farmers, who began by humbly labouring under the conditions above described, and are to-day rich land-owners, possessing enormous tracts of land, which they work in the way that they find most profitable.

It is hardly necessary to say that the agricultural methods employed vary according to the situation of the farms, their fertility, and the means of communication. Agriculture, properly so called, establishes itself and spreads along the waterways or railways which facilitate the transport of the harvests. The crops principally grown cannot afford the cost of transport at a greater distance than 180 or 190 miles by railway from the nearest point of embarkation or consumption, and the nearest railway-station must not be further than 18 or 20 miles. There are only a few crops of greater value that can be profitably grown at greater distances, their higher prices covering the increased cost of transport.

The region consisting of the Provinces of Buenos Ayres,

Santa Fé, Córdoba, and Entre Rios, which is the richest in cereals, is also that in which the greatest number of small farms are to be found. The statistics for 1901-1902 show that out of 37,434 farms 13,150, or about 36 per cent., were worked by their owners; 18,819, or 50 per cent., by tenants; and 5465, or 14 per cent., by *métayers*—that is, tenants who give up from half to two-thirds of the crops to the owner of the land. Other more recent statistics, relating to the Province of Santa Fé, give the number of farmers owning their land at the time of the harvest as 6747, or 32 per cent., and the number of tenants as 14,227, or 68 per cent.

The majority of the farms, especially those cultivated by the owners, says the *Investigación agrícola*, have an area varying from 60 to 250 acres. Farms held on lease or by payment of part of the harvest are usually larger, especially in the former case, and the work is done with greater expedition, but as a rule less perfectly and without the same stimulus. Farms varying from 750 to 1500 acres and more which employ day-labourers are still less numerous, since as a general thing nothing is gained by employing them. On the other hand, however, there are large farms whose owners in reality only supervise matters of administration, and which are divided among tenant-farmers or *métayers*, paying so much per cent. of the harvest, or a rent in kind, according to the crops and the conditions agreed upon. In such a case the proprietor or colonist is not actually an agriculturalist, but a business man, who more often than not has not sufficient knowledge to assume the scientific or even the rational direction of the operations on his estate.

Agricultural Products.

Having considered the physical conditions of the Argentine soil, the regions given over to particular forms of agriculture, and the disposition of rural property, the moment has now come to consider what areas are at present respectively producing crops of various kinds from seed, comparing them not only with the area of each province, but also with the statistics of previous years. In making this inquiry, we have a valuable starting-point in the *Censo agropecuario*,

taken in the month of October 1888; the first serious undertaking of the kind ever attempted in the Republic under competent direction.*

In an introductory chapter the Director of this census says: "It is only eleven years since the products of Argentine agriculture have been greater than the country's needs. For example, the quantities of wheat exported before 1878 were so small as to be negligible. Now we see that in eleven years we have reached a point at which we export 8,800,000 bushels of wheat (1887), 255,000 bushels of flour (1888), 14,470,000 bushels of maize (1887), and 3,248,000 bushels of linseed (1887). Those who will look into these figures will perhaps agree that they represent a great progress for so short a time."

The area of agricultural land in cultivation, according to the census of 1888, amounted for the whole Republic to 5,984,790 acres, of which 2,014,000 acres, or about 33 per cent. were under wheat; 1,979,830 acres, or 33 per cent., under maize; 963,320 acres, or 16 per cent., under lucerne; 299,050 acres, or 5 per cent., under linseed; 71,420 acres, or 1·2 per cent., under barley; 97,660 acres, or ·9 per cent., under vines; 52,020 acres, or ·8 per cent., under sugar-cane, and the rest under crops of no great importance.

This point of departure being established, let us pass over the follies of and the damage caused by the frantic speculations of 1888 and 1889, as well as the financial failures of 1890, and let us call a halt at the year 1895, in which the country, still under the effect of a terrible catastrophe only lately undergone, had recovered itself and resumed work with a fresh ardour: the only proper remedy to heal its wounds, and to set it once more on the paths of progress. This inventory of the progress realised by the Argentine during seven years of misfortune is all the more interesting in that the second national census was taken at this time, thus precisely marking the economic, democratic, and political progress of the country. We find that in 1895—limiting our inquiry to the four principal cultures—the

* Cf. *L'agriculture et l'élevage dans la République Argentine, d'après le recensement de la première quinzaine d'octobre 1888*, by F. Latzina, printed by P. Mouillot, Paris, 1889.

progress realised during these seven years was as follows:—

Products.	1888	1895	Increase in Seven Years.	
	Acres Cultivated.	Acres Cultivated.	Absolute.	Per cent.
Wheat ...	2,014,130	5,062,717	3,048,587	151
Linseed	299,050	946,690	647,640	219
Maize ...	1,979,910	3,073,130	1,093,220	55
Lucerne	963,300	1,729,000	766,700	79
Totals	5,256,390	10,811,537	5,555,147	105

If we now compare the figures for 1895 with those for 1902, we find that the national agricultural expansion has never ceased during this second period of seven years. During this period, moreover, an important change occurred; one which encouraged production by placing exchange upon a solid basis: we refer to the law of monetary conversion, which gave paper a fixed value and abolished the discount which had hitherto affected all private commercial transactions.

In comparing the figures of the years 1895 and 1902, we find that the progress was as follows:—

Products.	1895	1902	Increase in Seven Years.	
	Acres Cultivated.	Acres Cultivated.	Absolute.	Per cent.
Wheat ...	5,062,717	9,124,449	4,061,732	80
Linseed	946,690	3,228,774	2,282,084	238
Maize ...	3,073,130	4,450,060	1,376,930	44
Lucerne	1,729,000	4,273,502	2,544,502	147
Totals	10,811,537	21,076,785	10,265,248	94

It now remains to examine the third period, from 1902 to 1904-1905, the statistics of which are as follows:—

Products.	1902	1904-1905	Increase in Two Years.	
	Acres Cultivated.	Acres Cultivated.	Absolute.	Per cent.
Wheat ...	9,124,449	12,110,706	2,986,257	33
Linseed ...	3,228,774	2,674,738	554,036	18
Maize ...	4,450,060	5,648,988	1,198,928	27
Lucerne ...	4,273,502	4,940,000	666,498	15
Totals ...	21,076,785	25,374,432	4,297,647	21*

We see that, with the exception of linseed, the progress of agriculture has received no check; on the contrary, the

* This increase would amount to 73·5 per cent. in seven years, as compared with 94 and 105 per cent. for the two previous periods: but an average reckoned from two years is of course not reliable.—[TRANS.]

figures speak of still greater expansion, attesting to the great economic future of the country.

The culture of wheat, as we see, has increased by 2,986,257 acres; maize, by 1,198,928 acres; lucerne, by 666,498 acres. Unfortunately, the culture of linseed has suffered a decrease of 554,036 acres; a result to be attributed partly to low prices, and to the loss of a certain proportion of the previous crops.

As for maize, we see that in 1904-1905 5,648,988 acres were sown, a figure which represents an increase of 27 per cent. over the 4,450,060 acres of 1902. Yet the yield was only 131,155,000 bushels in 1904-1905, whereas in 1903-1904 it was 163,300,000 bushels. This sensible decrease was felt chiefly in the Province of Buenos Ayres, where the loss was one of 31,490,000 bushels, out of the total loss of 32,145,000 bushels, while in the Province of Santa Fé the yield was almost unaltered.

The average yield in 1904-1905 for the whole country and the entire area of land under seed may be estimated as 23 bushels per acre, as against 31.4 bushels in 1903-1904. The harvest of 1904-1905 would thus have left a large deficit, had not the increase of sown lands compensated in part the diminished yield of the soil per acre. This fact is a witness to the truth of the important fact to which we have elsewhere drawn attention: that the Argentine need no longer as before fear a bad total harvest, by reason of the enormous increase of sown lands.*

Since 1905 the agricultural expansion of the Republic has assumed considerable proportions, thanks to the splendid harvests, which have not only attracted a greater number of cultivators, but have also enabled these already established to take in and cultivate new land.

Examining only the figures relating to the harvest of 1908-1909, we find that the area sown in wheat, linseed, and oats has increased to 20,342,920 acres, which are divided, according to the figures issued by the Statistical Division

* Years hence, when the limit of expansion has been reached, or expansion for any cause has diminished, the inevitable exhaustion of the soil may cause some bad years, unless more scientific methods take the place of the policy of obtaining large yields at any cost; but the change will probably be gradual.

of Rural Economy of the Ministry of Agriculture, in the following proportions:—

Provinces.		Acres under Wheat.	Acres under Linseed.	Acres under Oats.
Buenos Ayres	...	6,184,139	1,090,750	1,431,839
Santa Fé	... ..	3,210,050	1,631,188	34,539
Córdoba	... ..	3,711,930	421,870	10,068
Entre Rios	... ..	793,610	565,630	37,050
Pampa Centrale	...	780,400	74,100	49,400
Other Provinces and Territories	...	185,250	6,370	1,235
Total	... ..	14,865,379	4,489,908	1,564,151

If we add to these figures the 7,042,710 acres sown with maize in 1906-1907, and the 7,410,000 acres of lucerne which were already in cultivation, we obtain a general total of more than 35 millions of acres of land bearing the principal Argentine crops at the end of 1908.

These figures reveal the large increase of 10 millions of acres over these relating to the harvest of 1904-1905.

In speaking of the chief crops of Argentine agriculture, there is one which we must especially mention, which, although not capable of repetition year by year, yet assumes considerable proportions, occupying already many millions of acres. We refer to the fodder known as lucerne, which in 1890 was grown only on 1,480,000 acres, and on 1,729,000 in 1895; while to-day no less than 7,412,000 acres are under lucerne.

This crop is a new source of wealth for the Argentine. Its growth has arisen from the increased value of lands which were until lately considered unfit for the production of cereals. These lands are now greatly in demand, and of late years great fortunes have been made out of them.

Lucerne serves two different purposes; it is exported as dried fodder, or is used at home to feed and fatten cattle. Hence the lucerne farmer may either graze his holding or mow it; so that there are lucerne farms and lucerne "estancias," or ranches, each having its distinct characteristics.*

The farms are mostly near the stations of the chief railway-lines which lead to the ports of embarkation, and consist of holdings of 150 to 250 acres, cultivated by small

* Lucerne is exported chiefly to Brazil and South Africa.

proprietors, or more generally by *métayers*—tenants who pay in kind. The mowing, drying, raking, gathering and stacking of the lucerne are operations which last from October to March; the embalement, or packing into bales, which are pressed and bound with iron, by means of a press worked by horse-power, occupies the rest of the year. There is also a form of exploitation which is more elementary and also more rapid: the cutting and immediate sale of the crop as green fodder; this method is in use on farms near the cities.

But the great lucerne belt, which occupies by far the greatest proportion of the sown lands, is composed of the “estancias”, which are composed of fields or farms of lucerne destined for the feeding and fattening of animals, chiefly cattle. These exist of all sizes; from the “estanzula” to the largest ranches. *Latifundia* sown with lucerne are common in the south of Córdoba, and there are instances of immense green savannas of from 35,000 to 50,000 acres—roughly, from 50 to 80 square miles in extent—consisting entirely of lucerne farms and belonging to a single lord and master. There are several settlements or colonies of this kind in this region; such as the Colonia Maria Soledad, situated at Carnerillo and at Chucul, including some 42,000 acres of lucerne farms; and the Duggan prairie, which has 32,000 acres of lucerne. Properties of 15,000 acres are numerous.

According to the last statistics published, the culture of lucerne is distributed as follows: Province of Buenos Ayres, 1,235,000 acres; Province of Córdoba, 1,235,000; Province of Santa Fé, 740,000; Pampa Central, 300,000; Province of San Juan, 200,000; other Provinces, 250,000; giving a total of some 4,000,000 acres. At the moment of writing these lines this area should certainly have increased to a total of $7\frac{1}{2}$ millions of acres.

In spite of the great progress already achieved—it was not less than 25 per cent., for instance, in the Province of Córdoba in 1903-04—the culture of this species of forage is still in its infancy in the Argentine; it is bound to increase notably, on account of the superb results to be obtained, both from its use as fodder and on account of the manner in which it will transform a certain kind of uncultivated soil which

grows nothing but tough grasses of slow growth and low nutritive value.

One of the first economic effects produced by the growth of lucerne on a particular estate or in a given neighbourhood is that it increases the value of the land on which it has been sown. On this point several cases have been cited which would seem incredible, were they not easily verified. Fields which three or four years ago were sold for 2 paper piastres per acre are to-day worth 30, and lands which were sold for 25 to 30 piastres are now sold for 80 and 100 piastres.*

Lucerne farms also increase the value of the land in their neighbourhood. It is enough to use the phrase, "good land for lucerne," and the land referred to will immediately realise a high commercial value.

Of the profits to be derived from lucerne when exploited in a rational and up-to-date manner, we may judge from a single instance reported in the Buenos Ayres *Standard*: a league † of meadows sown with lucerne in La Penca, in the south of the Province of Córdoba, has yielded in a year a profit of £30,000; and in another year it actually produced a profit of £42,800. This journal also adds that a league of similar land in New Zealand would be worth no less than £360,000.‡

The constant increase of sown lands is certainly the most notable feature of the agricultural situation. It is the more interesting to note that of late years this development has been due to the nation's own resources, as after the politico-financial crisis of 1890 the current of immigration and colonisation which had assisted agriculture in previous years was almost completely checked. As soon as the flow of immigration is re-established—and it seems to us that

* Probably the reader need not be told that the roots of the lucerne plant accumulate enormous quantities of nitrogen-yielding bacilli, thus producing organic compounds in the soil, ready for use by the next crop sown. The old practice of sowing clover and ploughing the roots into an exhausted field revives the land in this manner.—[TRANS.]

† This league is that of 2500 hectares, or 6175 acres; making the linear league 3·14 miles.—[TRANS].

‡ Cf. *Anales de la Sociedad rural Argentina*; Art., *El Pais de la Alfalten*.

it is already recovering, thanks to the attractive power of the abundant harvests rather than to any political or administrative measure—we shall certainly see that the agricultural yield of the Republic will receive a fresh impulse from this cause.

The 35 millions of acres sown in 1908-9 represent a little over 4·07 per cent. of the entire surface of the country, as compared to a percentage of '008 in 1888. Besides this, we must not forget that according to the figures of the agricultural and pastoral census of 1908, 646,620 square miles, or rather more than 39 per cent., are employed in the feeding of 67,211,754 sheep, 29,118,625 horned cattle, 7,531,376 horses, 465,037 mules, and 285,088 asses.

Finally, if we admit the possibility of considerably increasing, by means of the intensive system, the yield of cultivated soil, we see that it will also be possible, on the same stretch of land, to increase the number of head of cattle; so that it is permissible to conclude that the Argentine Republic can still conveniently give up a third of her surface to colonisation, without in the least affecting or damaging the industry of stock-raising.

Knowing the extraordinary progress attained by Argentine agriculture during the last twenty years, as well as the development of each of the particular crops preferred by the Argentine farmer, we must now inquire in what regions of the country this expansion has made itself particularly felt. For this purpose we will divide the Republic into geographical belts, confining ourselves here to an examination of these Provinces in which agricultural progress has been particularly notable, and limiting ourselves to the three principal forms of culture :

*Total Surface cultivated during the Agricultural Year
1908-1909.*

Geographical Belts.				Number of Acres Cultivated.
PROVINCE OF BUENOS AYRES—				
Northern Section	...	...	...	998,940
Western Section	...	...	...	3,043,700
Central and Southern (first group)	...	..	..	1,807,190
Central and Southern (second group)	...	...	...	2,755,980
				8,605,810

Brought forward,

Geographical Belts.					Number of Acres Cultivated.		
PROVINCE OF SANTA FÉ—							
Northern Section	326,210	
Central Section	3,194,698	
Southern Section	1,455,650	
						<hr/>	4,976,558
PROVINCE OF ENTRE RIOS—							
First Section	360,300	
Second Section	506,950	
Third Section	527,980	
						<hr/>	1,395,230
PROVINCE OF CÓRDOBA	4,064,760
TERRITORY OF PAMPA CENTRAL			913,900
						<hr/>	
TOTAL					19,956,138

It will be seen from this table that the great agricultural belt of the Argentine is formed by the Province of Buenos Ayres, Santa Fé, Córdoba, Entre Rios, and the Territory of Pampa Central. This latter has taken an important place in the national production, and so rapidly, that we may still prophesy a notable expansion of its resources. The other productive belts have in proportion made less progress, excepting the Province of Mendoza, where vine-growing has been developed, and that of Tucuman, where the culture of the sugar-cane has made great strides.

There, for the moment, the progress of agriculture has halted, as the other districts will only be developed later on, when the populations of the former regions overflow, unless some hitherto unexploited source of wealth—such as the quebracho in Chaco—attracts capital and labour.

At the time of the last harvest the Province of Buenos Ayres was in the front rank in the matter of wheat, no less than 6,184,130 acres being devoted to that cereal. This enormous area represented an increase of 2,933,920 acres since the year 1901-1902, and of 5,254,310 acres since 1895. If we compare this figure with that of 1888, when only 609,560 acres were under wheat, we find an increase of 5,574,570 acres.

Of the 6,184,130 acres of wheat sown in the Province of Buenos Ayres in 1908-1909, 3,620,300 acres, or 53 per cent., were in the region known as the "Centre and South" (the first and second groups united), formed by an assemblage of fifty-six

cantons, of which some, although they were only lately affected by the movement which has turned untouched and desert prairies into green fertile fields, are to-day important centres of production, having a considerable influence upon the commercial balance of the country.

The real development of agriculture in the Province of Buenos Ayres dates only from 1895. Until then it was considered merely as a country especially adapted for stock-raising, and this false conception was so rooted in many minds that it was believed that agriculture was out of the question, except in the Province of Santa Fé. Comparing statistics, we find that the latter Province had 992,080 acres of wheat in 1888 and 2,470,000 in 1895, while Buenos Ayres boasted only of 510,090 and 906,490 acres in the same years.

It was much the same with linseed; the figures being 180,300 and 657,020 acres in Santa Fé, and 108,650 and 160,550 in Buenos Ayres. Maize formed an exception; while Santa Fé, in the two years given, had only 150,670 and 429,540 acres under maize, Buenos Ayres had 1,259,700 and 1,652,430 acres.

Only in the agricultural year 1901-1902 did Buenos Ayres step in front of Santa Fé, and attain such crops of wheat as until then were unknown, leaving all competitors far behind. In the matter of linseed, for which Santa Fé has always had a special predilection, that Province has always, since 1888, maintained its superiority over Buenos Ayres. As for maize, Buenos Ayres retains its superior position, although it is just to admit that in 1901-1902 the other Province made considerable progress.

Before leaving Buenos Ayres, we must mention that the second place in the culture of wheat, is taken by the region known as the West, which, with its 1,471,360 acres, or 29 per cent. of the total, forms, like the analogous region in North America, one of the great grain districts of the Argentine. In this region there are cantons, such as those of Nueve de Julio, Lincoln, Pehuajo, General Villegas, Trenque Leuquen, and others, which, reputed from all time unfit for agriculture, have surprised every one by revealing themselves as absolute mines of wealth. This region has been touched, it is true, by the magic ring of the railroad, which has unrolled in

these new territories, so full of unexploited wealth, an immense network of tracks, whose marvellous effects make us think of the tales of the *Thousand and One Nights*.

It is in this region that we have seen, as the logical result of the agricultural awakening, the most surprising increase in the value of the soil. These prices mounted by leaps and bounds ; from £1, 15s. to £3, 10s., from £3, 10s. to £7, from £7 to £8, 16s. per acre, and even more ; yet one is forced to admit that this increase, though apparently capricious, has a real enough foundation, since it is based upon the remunerative qualities of the soil.

In the Province of Santa Fé, the cradle of the agricultural settlement in the Argentine, there are at present 820 colonies and cultivated lands, of which the surface under seed embraces an area of 7,223,980 acres, divided as follows : Wheat, 3,259,920 acres ; linseed, 2,037,990 acres ; pea-nuts, 29,390 acres ; lucerne, 1,787,280 acres ; other crops, 111,400 acres.

The Province of Córdoba has furnished another of the Argentine's agricultural surprises. Neglected, not so long ago, by the stream of immigration which set in for preference towards Santa Fé or Buenos Ayres, Córdoba began to attract the attention of labourers when the latter (discouraged by some calamitous years in Santa Fé) were drawn thither by the fertility of its soil, the scarcity of swamps, the regular rains, the cheap land, and the proximity of centres of consumption and ports of embarkation, and by the facilities of transport offered by an extensive network of railways. There the labourers set up their tents, and their numbers increased day by day ; there they devoted themselves to the strenuous task of reclaiming the virgin soil, and there, in return, they obtained magnificent harvests, a veritable benediction of grateful nature.

The results surpassed all expectation ; to such a degree, that to-day the Province of Córdoba is one of the first colonial centres of the Republic, and the Province which offers the most brilliant future to the cattle-breeder and the agriculturalist. To-day the transformation of the soil progresses so rapidly as to astonish both natives and foreigners.

To give some idea of the enormous development of this Province, it is enough to say that in 1898-1899 it counted 176 colonies and 71 settled estates. In 1905-1906 these figures were respectively 348 and 190. The size of these colonies has increased in the same proportions; in 1898-1899 their area was roughly 3,800,000 acres; it increased to 8,910,000. Of this enormous area, reclaimed and cultivated at the time of harvest in 1898-1899, some 3,150,000 acres represented wheat, 434,500 linseed, and 355,000 maize. We must also mention another important crop, which covers a large area of the Province of Córdoba; lucerne, which is represented by some 2,240,000 acres.

But the most surprising fact concerning the Province of Córdoba is not the vast area under the plough, but the prodigious increase of crops of every kind. Thus the area sown with wheat, which in 1898-1899 was 1,588,800 acres, was 2,417,920, in 1903-1904 and 2,695,620 in 1904-1905. It is the same with linseed; in 1898-1899 184,490 acres were sown; in 1903-1904, 439,830 acres. These figures give some indication of the vast agricultural future which lies open before this Province.

Another agricultural revelation has been afforded by the Territory of Pampa Central, which in 1888 had only 14,900 acres under the plough; some 11,000 being in maize, 2100 in lucerne, and 300 in wheat. In 1895 it contained 25,520 acres under culture, and in 1903 308,750 acres were bearing crops of various kinds; wheat, 71,630 acres, and maize, 419,900; and in 1908-1909, the Pampa contained 913,900 acres of cultivated soil; 790,040 under wheat, 74,000 under linseed, and 49,400 under oats.

In the space of twenty years the Pampa, once regarded as a sterile waste, almost impossible of cultivation or of settlement, has seen a great development. It contains to-day more than 80,000 inhabitants; twenty centres of population; about 914,000 acres under cultivation; 464,645 cattle; 4,809,077 sheep, and 281,537 horses; with an annual export of products estimated at 15 millions of paper piastres, or £1,280,000.

Its soil has greatly risen in value; the square league of 2500 hectares (or 6175 acres, or a square nearly 3·14 miles on

the side, or just under 10 square miles) sells for anything up to 100,000 paper piastres, or £8800; and even in the remoter cantons it will sell for £3500 or £4400. This extraordinary progress has been accomplished quite recently; it dates back hardly three years, and the prices tend to increase each day.

Before completing this sketch of the agricultural products of the Argentine, according to the official statistics, we must remind the reader that the total of these products increases by leaps and bounds, so that the figures given must be regarded as strictly provisional, on account of the great development to be foreseen as new centres of colonisation are formed. The Pampa Central, of which we have just spoken as a very mine of wealth, is capable of producing in the future enough meat and grain to nourish a great part of the population of the world.

In the Argentine men employ, for the more important crops, such as wheat, maize, linseed, lucerne, etc., the latest and most perfect agricultural implements and machines; cultivators, ploughs, drills, harvesters, etc., etc. We have not space to mention all; but it is enough to say that in the regions where farming on a large scale is the rule, a progressive spirit is in the air, which impels the owners of great establishments, and even simple settlers, to furnish themselves with the very best machinery, for which they sometimes pay considerable sums. That agriculture has achieved the rapid expansion of which we have just given details, notwithstanding the little help which immigration has lately rendered, is due principally to the employment of the perfected machinery in common use.

The best types of ploughs, harrows, drills, and reapers of all kinds—binder-reapers, traction-engines, winnowing and thrashing machines, all of the best construction and the most recent model—are familiar to the Argentine farmer, who makes constant use of them.

The owners of the great “estancias” make all necessary sacrifices in order to work their estates in the latest and most perfect manner. The machinery comes from the United States, and facilitates all the operations of *la grande culture*. Two or three years ago, for example, saw the

advent of a new machine, simple and of moderate price, which replaced the reaper and thrasher, by performing both operations at once as it moved. It reaps the ears of corn, winnows them, grades the grain, and pours it into sacks; leaving the straw, it is true, but the value of straw in the Argentine is negligible. All these operations are performed as the machine progresses; four horses are enough to draw it. With this new machine corn that is standing in the morning is reaped during the day, and by the evening is ready for despatch to the port of embarkation.

To give some idea of the extent to which agricultural machinery is used in the Argentine, we may mention that in the period 1890-1904 there were imported from abroad, mostly from the United States, 459,006 ploughs, officially valued for customs purposes at £1,331,409; 22,783 winnowers, valued at £277,976; 98,470 reapers, valued at £2,041,982; 37,824 drills, or sowers, valued at £176,268; and 4770 thrashing-machines, valued at £1,250,184. From 1898 to 1904 13,725 maize huskers were imported, valued at £340,479.

To complete these data we append a table, giving the number of agricultural machines imported in the course of the years 1905, 1906, 1907 and 1908:

			1905	1906	1907	1908
Ploughs	...	...	66,404	84,948	59,196	29,775
Winnowers or huskers	...	...	790	785	134	98
Reapers	...	...	14,492	20,739	17,334	18,722
Drills or sowers	...	...	7,911	25,447	13,975	9,528
Harvesters	...	...	706	2,011	226	1,866
Thrashers	...	...	909	1,136	490	969

We must also mention that there has been a great development of factories in the Argentine, which turn out agricultural machinery and implements; some of these have been established with large amounts of capital, and possess an equipment fully equal to that of the best equipped establishments of Europe.

The Agricultural Yield.

Having now considered the agricultural progress achieved in the Argentine, the areas under seed at different periods, the prevailing crops, and the regions in which agriculture is more especially established, we must now study the results of

agriculture; that is to say, its yield, and shall attempt to forecast the future reserved for the country.

As we have already stated, there are no complete statistics available, such as there are in the United States and in other countries, which give in detail the cost of working farms of various sizes, and the prices at which the latter sell their produce; and it is only from such details that we can calculate the net profit of each acre. But, despite this lack, we can probably find the data we require by resorting to the opinion of those competent in such matters, either because they are themselves practising farmers, or because they have set themselves the same problem as that we are facing.

In the good lands of the Provinces of Córdoba and Buenos Ayres, and in the Pampa Centrale, the hectare may yield the settler 50 piastres (in notes), or £4, 8s.; in other words, £1, 15s. 7½d. per acre; provided there is no hail, and if he escapes the other agricultural plagues. Some estates this year have produced as much as 2000 kilos of wheat per hectare, or 29 bushels per acre; yielding, at \$6 per ton (the Argentine ton of 2205 lb.) a yield of 120 piastres * (paper) per hectare, or £4, 5s. 6¼d. per acre. Estimating the expenses at 25 to 33 per cent., there remains a profit, let us say, of £3, from which we must still deduct some 10s. for rent, so that the labourer draws a final profit of 70 piastre notes per hectare, or £2, 10s.

In one particular establishment, not far from the station of Labenlaye, on the Buenos Ayres Pacific line, the yield of a family of *métayers*, who cultivate 125 to 150 acres, and pay a quarter of the crop to the proprietor, and also work on the cattle-ranch on days when there is no work in the fields, make an annual profit of £88 a year. This is equivalent of a profit of from 10s. 4d. to 14s. 4d. per acre, earned by cultivating the soil as *métayers* or tenants in kind, retaining 75 per cent. of the crop; but it must be remembered that this is absolutely a net profit: all the labourers' expenses, the cost of nourishment, clothing, and other current expenses, are all debited first; so that the £88 may be saved or spent or invested.

* The piastre note is approximately worth 2·2 francs, or 19·2 pence—1s. 7½d.

But an argument more eloquent than all the arithmetical demonstrations which we might draw from particular cases is the well-known fact that every year a large number of labourers become the proprietors of the holdings they cultivate, or acquire other holdings in the neighbourhood. It is by no means an exceptional thing for those who cultivate a tract of land to draw from it in a single year a sufficient sum of money to acquire it for themselves, while reserving the expenses of sowing and other work to be done before the next harvest.

To support this statement, here are a few exacter details as to the capital required to reclaim a holding and its approximate yield.

According to calculations furnished by a man of great experience in matters of colonisation, the capital required by a family of four or five persons cultivating 250 acres of wheat, including the expense of installation in the first year, may be estimated as follows :—

	£	s.	d.
Two Ploughs, sulky type	21	2	0
Two Harrows, threefold	7	18	0
One Roller	4	8	0
One Husker or winnowing machine	39	12	0
Twenty Oxen	88	0	0
Two Horses	8	16	0
Two Carts	35	4	0
Harness, chains, implements, etc.	8	16	0
House, corral, well, fencing	105	12	0
	<hr/>		
	£319	8	0

The family or the colonist who does not possess such capital will find rich proprietors or colonists who will furnish him with implements, draught animals, and seed corn, as well as the necessities of life. The harvest over, the seed corn is reserved for the next sowing; the expenses of the harvest are deducted, and the net profit is halved, one half going to the proprietor, and one to the colonist. It is thus that the majority of immigrants begin to earn the capital which enables them to become proprietors.

For bachelor immigrants there is another method, which gives excellent results: they place themselves with colonists who possess some capital as "interested servants," or profit-sharing labourers, lending their services from the ploughing

to the harvest of wheat and linseed. They receive for their services food, board, and 6 or 7 per cent. of the gross profit of 100 hectares. They put the sums received during three or four years out at interest, and have then sufficient money to buy the necessary implements and to become tenant farmers. Three or four years later they buy land on the instalment system, and finally become large land-owners; one may count by the hundred those who have followed this course, have become the proprietors of wide tracts of land, and have to-day made large fortunes.

As soon as he is a land-owner the colonist or farmer has already an almost certain future before him, as the net profits he obtains each year accumulate in geometrical progression, unless some fatality pursues him: a thing that is of sufficiently rare occurrence. To gain some idea of his net profits, we turn to the following details, which are drawn from a competent source:

*Approximate Estimate of the Expenses and the Yield of
247 acres of land sown with Wheat.*

EXPENSES.			
<i>Preparing the soil.</i> —Two ploughings and a raking,	£	s.	d.
at 2s. 3½d. per acre	28	3	2
<i>Sowing, drilling and harrowing,</i> at 3·88d. per acre	3	10	5
<i>Seed.</i> —238 bushels of seed corn, at £8, 16s. per ton ...	57	4	0
<i>Harvest.</i> —Reaping and stacking, at 4s. 2·68d. per acre	52	16	0
<i>Thrashing.</i> —4400 bushels (120 tons) of grain, at			
17s. 6d. per ton	105	12	0
<i>Sacks.</i> —1500, at 5·024d. each	26	8	0
<i>Transport.</i> —To granary, port or station, 120 tons			
at 8s. 8d. per ton	52	16	0
<i>Rent.</i> —247 acres, at 8s. 6·6d. per acre (approx.) ...	105	12	0
<i>General expenses.</i> —Repairs, tools, dilapidations,			
wages, hire of machinery, etc.	52	16	0
Total	£484	17	7

RECEIPTS.			
Sale of 120 tons (4400 bushels) of wheat, at £6, 3s.	£	s.	d.
2½d. per ton (3s. 4·28d. per bushol)*	739	4	0
Expenses of growth and preparation	484	17	7
Settler's net profit	£254	7	5

In short, a profit of about one pound per acre.

* At the present price (22 francs per 100 kilos, or about £8, 16s. per ton the sale would produce £1056, a net profit of £571. This is unusual.

The above figures relate to the property known as "La Vizcaina," in the Department of Bolivar; it consists of 123,800 acres of agricultural land, or 183 square miles, and is the largest agricultural farm in the Republic belonging to a single owner or held by a single tenant. It must be mentioned that, on the whole, the land is high; it has never been invaded by locusts; the depth of the mould or upper soil is considerable, and the property has two railway stations built upon it and a third about $2\frac{1}{2}$ miles distant, which facilitate the despatch of the harvests.

The above figures do not give a precise idea of the farmer's situation, since agricultural land is let for four years, and in four years, six harvests may be obtained (three of wheat and three of maize), which sensibly diminishes the cost of working and increases the profits in proportion.

We may use the same table as relating to linseed, substituting £7, 18s. 6d. per ton, or thereabouts, for the sowing, and £1, 1s. per ton for thrashing. In this district linseed-farming is accompanied by certain risks, on account of the scanty rain and the late frosts; sometimes the harvest is 7, 8, or 10 quintals (metric) per hectare, but it is usually only 3 or 4.*

In order that these figures representing the farmer's profit shall give a true idea of the reality, it must be remembered that besides the wheat crop he can also obtain another and equally profitable crop of maize in the same year, and he may also increase his profits by fattening pigs and raising game and other products which command a ready sale in the neighbouring towns.

These examples must not of course be taken as representing a general law; the net income of course depends upon the cost of production and the yield of each harvest, and these two factors may vary infinitely, where the crops under consideration are as large as those raised in the Argentine. But what we may affirm is that, besides a certain number of farms lying fallow, there are hundreds of thousands of acres

* In normal years, if the fields have been well worked, one may count on an average of 36 bushels of wheat per $2\frac{1}{2}$ acres, or 14 per acre; 36 bushels of maize per acre, and 12.5 bushels of linseed per acre. On virgin land the results are often of great interest; for it is not uncommon to obtain over 20 bushels of wheat per acre (1 bushel = 60 lbs.).

of virgin soil, purchasable at a low price, on which it is enough to cast the seed, after a superficial cultivation, in order to obtain a splendid harvest. In conditions as favourable as these, and using machinery which enables the farmer to cultivate enormous surfaces with little labour, there are always serious probabilities of success for the agriculturalist. This it is that explains the great increase of cultivated lands during the last few years, whether virgin lands divided and sold by the owner, or lands leased to tenants who pay in kind or give up a percentage of the crops.

In a country whose soil gives such wonderfully abundant yields, great fortunes, and fortunes rapidly made, are common. The Argentine, like the United States, has her legendary type of immigrant, who has progressed in a very short time from extreme poverty to great riches, by applying his energy and initiative to agriculture or stock-raising.

Here are two of the most notable and best-known, examples.

A few years ago there died in the Argentine one of the greatest landed proprietors; a man named Santamarina, whose life-history is worth relating.

Son of a small farmer of Galicia, Santamarina decided, when about twenty years of age, to seek his fortune in America. His means not permitting him to meet the expenses of the voyage, he resorted to the classical procedure; he shipped as a stowaway on a vessel about to leave Vigo on a voyage, to Buenos Ayres.

Discovered on the voyage, the captain had compassion on him, kept him on the vessel and landed him, fifty years ago, in the capital of the Argentine; without any resources, and sustained only by the hope of gaining a livelihood more easily than in Spain.

Santamarina immediately made his way towards the great plaza, where the produce of the country was at that time sold; and there, hoping to secure a job, he spoke to a man who was conducting a wagon, and whose business it was to bring wool from the country into the Buenos Ayres market.

This man, seeing him strong and willing, offered to share with him his work as wagoner; but he first inquired of

Santamarina whether he possessed a knife, as at that time in the Argentine it was the necessary instrument of defence, and at need, of attack, and was also employed in all the usages of the nomad life.

Santamarina had no knife; but he had a piastre, which the captain had given him before he left the ship, and with this piastre he bought a knife, which served in this partnership as his only capital.

Having led the common wagon for some time, Santamarina had saved enough to buy a better one for his own; then, chance aiding him, he purchased a few sheep whose wool he sold; and finally, by dint of work, he succeeded in saving sufficient capital to buy a little land and start sheep-raising on his own account. This was the beginning of his success; little by little Santamarina bought more sheep and more land, and became in the end one of the greater landed proprietors of the Argentine. He died in 1904, leaving a large fortune and a name justly honoured throughout the country.

To-day a visitor to his magnificent "estancia" of Tandil may still see, under a glass shade, the knife and a model of the wagon which were the first instruments of his fortune.

The second story is more commonplace, but no less true. Twelve years ago two Neapolitan immigrants came to settle at Rosario. To gain a living, and no doubt in memory of their former trade, they founded in partnership a *boliche*; that is, a bar for the sale of drinks. When a certain time had elapsed, their business being far from prosperous, they decided that one or the other of the two was one too many, and so determined to separate. But which of the two should retain the *boliche*? They drew lots to decide the point; and he whom chance favoured retained the business alone, while the other went in search of his fortune elsewhere.

The latter, far from allowing himself to be discouraged, made for Rosario harbour, in search of a new trade: he assumed that of a dock-labourer or lighterman. This was at the time when the growing of maize was beginning, in the Province of Santa Fé, to give satisfactory results. Our hero, having spent some time in carrying sacks of grain upon his back from the quays to the vessels about to sail,

conceived the idea of buying, with his savings, a sack of maize, and to sell it retail, in the country, for the purposes of seed. This first venture having succeeded, he continued his operations with a larger number of sacks; then, finally, he abandoned the trade of porter in order to enlarge his new business, which from that time increased by thousands of sacks, and soon became a great export business.

Thanks to the development of the culture of maize in this region, he has become one of the greatest merchants and speculators in this product, and enjoys to-day a fortune of many millions, while his companion, less happy in his affairs, still keeps the little drink-shop in Rosario.

CHAPTER II

THE PRODUCTION OF WHEAT IN THE ARGENTINE, COMPARED WITH THE YIELD OF OTHER EXPORTING COUNTRIES

The world's wheat-harvest—Comparison between the statistics of consumption—The conditions of production in Russia and in the Argentine—Comparison with the United States, India and Canada—The prospects of the Argentine export trade in wheat.

HAVING described the progress realised by the Argentine Republic in the course of the last few years, it will be not without interest to inquire what are the resources of those nations which are, or may be, the competitors of the Argentine in the world-market and in the production and consumption of wheat.

Here, according to the most reliable sources, are the figures relating to the average yield of wheat in the whole world during the last sixteen years:—

		Period 1894-1903.	Year 1904.	Year 1907.
Europe (bushels of 60 lbs.)	...	1,468,000,000	1,656,000,000	1,652,000,000
America	„	684,000,000	756,000,000	889,000,000
Asia and Australia	„	295,000,000	396,000,000	458,000,000
Africa	„	43,000,000	57,600,000	54,800,000
Totals (approx.)	...	<u>2,490,000,000</u>	<u>2,865,600,000</u>	<u>3,050,000,000</u>

We see that the European production of wheat represents nearly 59 per cent. of the world's production, for a population which, according to the calculations of M. Levasseur, consists of about 411 millions of inhabitants. If we reduce this figure by one-fourth, thus eliminating infants and the aged, we find that this population disposes of only 272·8 lb. of wheat per head, or 521·2 lb. less than the "type" or standard ration of 793·8 lb. per annum, recommended by the Bureau of Experimental Stations of the Ministry of Agriculture of the United States, after long and patient research.

In pursuing this inquiry into the distribution of wheat-production among all the countries of the world, we shall be able to judge of the rank occupied by the Argentine Republic, and by so doing to rectify an error which is frequently com-

mitted, the error of confounding exportation and importation, which gives this country a very different place to that which is its right.

Here are the figures showing how the production of wheat is distributed:—

COUNTRY.	Period. 1894-1903.	Year. 1904.	Year. 1907.
United States (bushels of 60 lbs.) ...	576,000,000	504,000,000	601,000,000
Russia „ ...	360,000,000	605,000,000	547,000,000
France „ ..	316,000,000	290,000,000	336,000,000
Austro-Hungary „ ...	180,000,000	170,000,000	197,000,000
Argentine Republic „ ...	76,000,000	147,000,000	177,000,000
Italy „ ...	119,000,000	143,000,000	148,000,000
Spain „ ...	93,600,000	91,800,000	109,600,000
Germany „ ...	116,000,000	144,000,000	101,700,000
Canada „ ...	63,000,000	67,300,000	82,000,000
Roumania „ ...	57,600,000	50,700,000	54,800,000
England „ ...	54,000,000	36,700,000	47,000,000
Bulgaria „ ...	—	50,700,000	42,800,000
Asiatic Countries „ ...	—	340,000,000	364,000,000
Australia „ ...	—	59,400,000	82,000,000
Other European Countries „ ...	—	78,800,000	65,400,000
African Countries „ ...	—	47,000,000	54,800,000
Other American Countries „ ...	—	29,000,000	27,000,000
Totals (approx.) ...		2,890,000,000	3,030,000,000

This table shows that in 1907 the Argentine occupied the fifth place as a wheat-growing country.

If we compare this production of wheat with the minimum ration of 793·8 lb,* which is considered indispensable to human nutrition, we see that apart from European Russia, with its 116 million inhabitants, there is left for the remaining 300 millions of Europeans, less a quarter, as we have explained above—that is, for a population of 225 millions—about 1,200,000,000 bushels of wheat. This quantity represents an average of 151·5 lb. per head per annum, or a deficiency of 249·7 lb. per head.

The population of Germany, estimated at 59 millions, has only 147·4 lb. of wheat per head, making a deficiency of 644·6 lb. per inhabitant.

* There seems something improbable about this figure. For one thing, very few people could eat over 2 lb. of wheat—representing over 3 lb. of bread—per diem; and white bread forms no important part of the diet of most populations. Probably the figures represent the amount of bread *necessary* to a hard-working labourer, whose dietary consists chiefly of bread—a diet only common to the south of England.—[TRANS.]

The United Kingdom furnishes its 42,500 inhabitants with only 50·6 lb. of bread per annum, leaving a deficiency of 741·4 lb. per head.

Thus Europe, which, without Russia, produces more wheat than the rest of the world, does not produce enough for her own consumption, low as it is. It is therefore necessary to seek out these wheat-producing countries which are in a position to make up this deficiency. Now at the present time there are very few such countries; they are Russia, the United States, the Argentine Republic, Canada, and India, and among these it is the Argentine for which the most important place seems to have been reserved.

Russia has hitherto been one of the great providers of wheat to Europe; but it would seem that this position is not one that she can retain. Russia is far from having attained the degree of agricultural evolution which the Argentine has achieved; it is true that she exports 80 per cent. of her wheat harvest, but then the Russian peasant eats only rye bread. Of the 326 millions of acres of cultivated land in Russia, 30 millions only are devoted to wheat, or rather less than double the area used for the same cereal in France, or just double the wheat-area of the last Argentine harvest.

In the wheat-belt of Tchernoziom, the black earth is all in cultivation, and its extent cannot be further increased. Fertile though this soil may be, and although its depth is from 12 to 40 inches, the results amount to no more than four or five grains of wheat for each grain sown. The last harvest gave about 5·54 bushels per acre, while the average in France is 20 bushels.

These results are due chiefly to the poverty and ignorance of the Russian peasant; it often happens that his wheat crop no longer belongs to him, having been sequestered by the tax-gatherer in payment of unpaid taxes. On the other hand, the Russian peasant cannot procure agricultural machinery, the price of which is increased by exaggerated tariffs.* He

* More: when it is provided for him he frequently will not use it; or it undergoes a series of remarkable accidents, so that the harvest has to be gathered by hand. This is more especially the case where he is reaping another's harvest, when his object is to ensure the employment of more hands. He is unable to understand that machinery means wealth and development. It is only fair to say that it seldom does in Russia, as he cannot easily get more land of his own, and his master's estate is often hemmed in by others.—[TRANS.]

cannot even obtain draught animals, his wretched resources not allowing him to procure them.

If to these factors we add the progressive exhaustion of the soil, we see that the production of Russian wheat for export is very near its limit; the more so as the home consumption of wheat tends to increase with the economic development of the country. We can hardly wish otherwise than that these peasant farmers, habituated to a life of poverty, should themselves consume some of the wheat they produce, instead of contenting themselves with rye.

Let us now compare this picture of Russian production to that presented by the Argentine.

What is it that is responsible for the superiority of the Argentine Pampa over the Russian steppes? It is the inexhaustible fertility of a virgin soil, which produces abundant crops, without necessitating artificial enrichment, nor even the system of the rotation of crops. The soil yields harvests of 20 bushels to the acre, without exhaustion, producing for many years in succession, as it is doing now in Chubut, in the south of Buenos Ayres, and in Córdoba, while the yield of the Russian harvests is only 5·5 bushels.

For the exploitation of this wealth, Argentine agriculture employs the most perfect machinery to be obtained in the world, employing thousands of horses also, to drive it; while the Russian peasant has to work with his own hands, having neither machines nor horses to multiply his strength.

What shall we say of the prosperous and fortunate situation of the Argentine colonist, who is not only enabled out of the fruits of his labour to have bread and meat in abundance upon his table, but is often in process of acquiring, and that without long delay, the earth he cultivates. His happy lot has nothing in common with that of the Russian peasant, the veritable serf of the soil, who never gets so far as to eat the smallest crumb of the wheat he has harvested.

The one labours under a soft, benign sky, which does not expose him to the rigour of extreme temperatures in an atmosphere of freedom and brotherhood which make for energy, while the other labours at his furrow in a severe and unequal climate, and under a system of political oppression which crushes his individuality and diminishes the value

of his efforts. A comparison between the social and economic conditions of agriculture in the two countries inclines us to conclude, without prejudice, that Russia cannot be considered a dangerous rival to the Argentine or the markets of the world.

The Republic of the United States of America is incontestably the first wheat-growing country in the whole world; and it is interesting to consider whether this country, which is also the greatest exporter of wheat, will remain in the future, in spite of the growth of internal consumption, a formidable rival to the Argentine in the markets of the world.

Let us first of all consider what great progress there has already been in the production of wheat in the United States.

Year.	Population.	Production. (in Millions of Bushels.)	Proportion Exported. Per cent.
1877 ...	46,353,000	280	25·6
1882 ...	52,495,000	373	31·8
1886 ...	57,404,000	346	26·5
1891 ...	63,844,000	386	26·6
1894 ...	67,692,000	383	41·5
1897 ...	71,592,000	414	33·9
1901 ...	77,647,000	506	41·36
1904 ...	—	533	—
1905 ...	—	645	—
1906 ...	84,216,433	669	26·6
1907 ...	—	621	24·1

In the United States the area under wheat has considerably increased, but the yield per acre has steadily decreased. Thus we find that in 1875 the yield was 12·3 bushels per acre; 17 bushels per acre in 1879; 11·7 in 1883; 14·9 in 1892; 13·4 in 1899; 10·5 in 1902; 10 in 1903; and 13·6 in 1904. Thus in spite of the increased yield, the results per acre have not increased, and the average of 1904 is inferior to that of 1879; while in France the average yield has been one of 20 bushels per acre from 1900 to 1904.

The national census of the United States for 1900 contains a graphic chart, which represents the average yield; from which we find that only in the north-west, certain districts of the west, and in a portion of the States of Washington, Oregon, and California has the production equalled this

maximum of 20 bushels per acre; in most other localities, which afford the vast majority of cases, the yield has varied between 8·5 and 15·6 gallons per acre.

Having glanced at the production of the United States, we must inquire whether this great nation is increasing its exportation of wheat proportionately, and how far such exportation may prove an obstacle to the development of the Argentine.

The following figures representing the years of the largest export of wheat, will throw light upon this matter.

Years.	Wheat Exported. (Millions of Bushels.)	Price. (Per Bushel on the Dock.)
1879 ...	145	5s. 5½d.
1892 ...	218	5s. 3d.
1898 ...	210	5s. 0d.
1899 ...	214	3s. 10¾d.
1901 ...	209	3s. 8¾d.
1902 ...	227	3s. 11¼d.

We see that in spite of the European alarmists, who in 1876 denounced the "American Wheat Peril," it took fourteen years for the exports to increase from 145 to 218 millions of bushels, and that the latter figure has been only four times surpassed since 1892.

The production of wheat, on the other hand, increased 116 per cent. between 1875 and 1903, while the population, during the same period, increased only by 82 per cent. But we must not forget that although the increase in population is constant, that of production is not—indeed, the harvest of 1901 amounted to only 273 million bushels of wheat, as compared to 280 millions in 1877. There is a decrease in years of bad harvests, but the population naturally knows no such decrease.

The consumption of wheat did not increase between the census of 1890 and that of 1900; the average remained 424·6 lb. per head, representing a deficit of 368·8 lb. below the standard allowance of 793·4 lb.

On the other hand, as the population increases by about 1¼ or 1½ millions per annum, while consumption remains stationary, we may conclude that if this country has not yet reached its maximum of wheat-production, it is very near that stage, and that the moment is approaching at which all

its wheat harvest will be absorbed by internal consumption, to the detriment of the export trade.

We have mentioned India as a wheat-exporting country; but it is no longer a rival to the Argentine in the conquest of the international markets. Here is the comparative table of exportation from India and the Argentine.

Years.	India. (Millions of Bushels.)	The Argentine. (Millions of Bushels.)
1891-2 ...	54·5	34·2
1900-1 ...	·9	36·8
1902-3 ...	18·5	60·0
1905-6 ...	26·7	109·0
1906-7 ...	28·9	106·8

A mere glance at these figures is more eloquent than any commentary, since the exportation of wheat from India increased by barely 10,000,000 bushels between 1902 and 1907, while that from the Argentine increased by 46,000,000 bushels. On the other hand, it is known that India exports only 10 per cent. of her harvest, although her extremely frugal population consumes only 1·26 lb. of wheat per head, instead of the 793·4 lb. we have taken as our basis of annual consumption. We see then that the production of India, if her population consumed a normal amount of wheat,* would not satisfy the national requirements, so that far from exporting wheat she would, on the contrary, be forced to import large quantities from without.

Canada is among those wheat-growing countries whose competition is most to be feared; and this for many reasons—geographical, political and economical. If Argentine statesmen do not seriously apply themselves to attracting a foreign population, and to reducing the expenses which press upon the inhabitants, the Argentine will run the risk of being supplanted in the future by this important British colony.

Canada, from many points of view, presents a singular analogy to the Argentine Pampas. Like the latter, it is an almost desert country, its area being 3,190,000 square miles (nearly 2 millions more than the Argentine), with a population of 5,371,000, or slightly less than that of the Argentine; and like the latter, Canada is a country in process of

* There is really no such thing as a normal consumption of wheat, especially for India. The amount consumed is a matter of climate, local or national foodstuffs, fuel, methods of cooking, etc.—[TRANS.]

formation. A similarity which completes the comparison is that the exports of Canada consist principally of the products of agriculture and stock-raising. Her principal client for wheat is England; in 1906-1907 the harvest was 84,470,000 bushels, and 41,033,000 bushels were exported; or almost exactly half.

Here we should remark that the Canadian Government is making every effort to increase the population, and spares no pains to attain its object. In contrast to what has been done in the Argentine, where the public lands have only served to form *latifundia*, and to enrich a few individuals, the soil in Canada is sold by the aid of accurate maps, which are accompanied by a mass of information upon questions that may interest prospective colonists; more, the purchaser is given all kinds of facilities for payment, as well as for meeting the first expenses of installation. Thanks to a rational and active propaganda, immigration is abundant; the figures for 1903 were 128,364, compared with 112,671 in the case of the Argentine. Finally, Canada contains 19,500 miles of railways, as against 13,600 in the Argentine.

From the foregoing data we may conclude that the countries capable of exporting wheat are far from numerous, and that the area sown with cereals throughout the world is comparatively small. Hitherto wheat has been grown on an extensive scale in the United States, Russia, and India; the agriculturalist demands everything of the soil and gives it nothing, so that the alternative will soon arise of losing the harvest, or of restoring fertility to exhausted soils, by means of costly manures which will absorb enormous sums. Then the legend of new countries will have had its day.

To resume: there exists an enormous discrepancy between the needs of the consumer and the production of wheat; and the Argentine Republic, thanks to a concatenation of favourable economic and physical circumstances, is certainly in the best position in a great measure to supply this deficiency. But to obtain the desired result it is indispensable that she should still increase her population, and that the colonist should find upon the hospitable Argentine soil not only the guarantees of liberty and justice, but conditions propitious to his evolution as a land-owner.

CHAPTER III

STOCK-RAISING

The transformation of the old "estancia"—The principal stock-raising establishments: description, extent, number of heads of cattle and favourite breeds—The great "estancias" of the South and Patagonia.

Approximate area of the soil devoted to cattle and sheep; general estimate of the numbers of cattle and sheep—Results of the census of 1908—The capital represented by Argentine stock-raising.

HAVING spoken of agriculture and its future, we must mention another industry, which is the second source of national wealth—the pastoral industry.

As a result of the rapid rise in the value of land, and the multiplication and selection of animals, the old form of Argentine stock-raising is undergoing, at the present time, a profound modification throughout the country. The traditional ranch or *estancia*, on which the animals browsed at will on vast prairies enclosed by wire fences, exposed to all the variations of the weather and all the vicissitudes of the temperature, feeding only on the grass of their pastures. This old type of *estancia* is gradually disappearing; is undergoing a transformation into carefully-managed farms, on which artificial prairies are constructed; farms with lucerne fields of 12,000, 25,000 or 50,000 acres, surfaces difficult for a European to conceive.*

The science of pedigree herds and the culture of carefully-enclosed pastures have created, says a distinguished writer, the true pastoral *industry*, in which stables and barns and sheds take the place of the ancient "corral."† The wealthy owner drives from the railway station to his *estancia*

* A field of 12,000 acres would be, for instance, 4 miles wide and over $4\frac{1}{2}$ miles long; one of 25,000 acres, 6 miles wide and $6\frac{1}{2}$ miles long; one of 50,000 acres, 7 miles wide and 11 miles long.—[TRANS.]

† Cf. *Costumbres y Creencias populares de las Provincias Argentinas*: A lecture by M. P. Groussac at the World's Congress at Chicago, June the 4th, 1893; published in *La Nacion* of the 23rd of October 1893.

in a carriage ; the old rustic ranch-house is transformed into a true country-house, sometimes a veritable *château*, with a park and gardens. There are estancias within a hundred leagues of Buenos Ayres which we remember as desert country in the power of the Indians, where now traps and carriages of English type are seen crossing the plains, where folk dine in evening dress in luxurious homes. The European stock-breeders have driven back the Guacho to the great estates on the borders of the desert.

Nothing would be more difficult—and for our part we renounce the task—than to say which are the first stock-raising establishments of the Republic ; whether by reason of their extent, the numbers and the breed of their animals, or the magnificent dwellings of their owners. Establishments of this type are to be counted by hundreds, by thousands.

Nevertheless—though exposed to the danger of falling into inevitable errors or omissions, for lack of precise information—we must not forget to mention the *Estancia San Juan*, founded by Señor Leonard Pereyra, at a distance of 25 miles from Buenos Ayres, and a mile and a half from the La Plata, and consisting of over 40 square miles of meadows in full luxuriance. Then there is the *Estancia San Jacinto*, belonging to Señor Hugel T. de Alvear, an establishment reputed as one of the foremost in the country, which embraces an area of 244 square miles, or about one-third the area of the county of Surrey. Of this enormous area some 64 square miles are under lucerne, and support 100,000 Durham cattle, 100,000 Lincoln sheep, and 10,000 horses.

The *Estancia la Gloria* of Santamarina & Sons, situated at Laprida, in the Province of Buenos Ayres, comprises 145 square miles, and supports 20,000 cattle and 60,000 sheep.

Another establishment, which might be taken as a model, is the *Estancia San Martín*, the property of Señor Vincent L. Casares, which is situated at Cañuelas, and covers an area of some 30 square miles. The specialities of this establishment are the breeding of draught-horses — Morgans, Hackneys, Shires and Clydesdales ; the breeding of cattle—Durhams, Holsteins and Swiss—of which the finest individuals are kept for breeding, and the second-grade animals fattened for export ; the keeping and selling of bulls of the three

varieties named for general breeding purposes; and finally the breeding of pedigree rams of the Lincoln and Negrete breeds, and also of pure cross-breeds and of pure-blooded Yorkshire pigs. The horses from this estancia have a merited fame throughout the Argentine, and are even beginning to be known abroad.

A portion also of this estancia is an establishment known as *La Martina*, which alone supplies three-quarters of the milk consumed in Buenos Ayres, and which also manufactures butter for home consumption and for export.

Another of the great stock-raising establishments of the Republic is the Señor Carlos Casares' *Estancia Huetel*, about 150 miles from Buenos Ayres, on the Southern Railway. It occupies an area of some 240 square miles, all enclosed by wire fencing, and divided into forty-two stock-raising establishments, with fifty-seven shepherds' houses and five managers' houses. This establishment contains about 62,000 Durham cattle, 87,000 Lincoln sheep, with pedigree rams, imported or born on the estancia, and 4200 Clydesdale horses, draught-horses and saddle-horses. About 11,000 acres are sown with lucerne, and 5000 with maize, wheat, oats and linseed. There are fifty-six or more imported bulls, and notably one of the finest of his race, the celebrated Aguinaldo, winner of the first prize awarded by the Agricultural Society.

The park of this estancia draws the attention of visitors; it is 500 acres in extent, and contains some 520,000 forest trees, 870,000 shrubs, and 35,000 young trees. The total number of trees on the estate is over 2 millions.

There is a school on the estate, all the expenses of which are paid by the proprietor.

The *Estancia San Jacinto*, owned by Señor Saturnin J. Unzue, also merits a special description. It is a few hours distant from Buenos Ayres, and covers an area of some 55 square miles. It supports 10,000 cattle and 30,000 sheep. On this estancia the Durhams have been brought to a great pitch of perfection. The stud is famous for its saddle-horses, and contains 140 pedigree animals, imported or born in the country.

Las Palmas, belonging to Colonel Alfred T. Urquiza, would figure as a model establishment in any country in the

world. In the Province of Buenos Ayres, in which it is situated, it would be difficult to find a pedigree stock-raising establishment so well organised, and so well adapted to its purpose. The estate consists of some 4000 acres, overlooking the majestic Parana de les Palmas, with its green islands, which reach as far as the Rio de la Plata. Here about 3000 beasts are annually fattened for export. The cattle are short-horns, and the horses Hackneys.

Yet another establishment, which must be reckoned one of the best in the Argentine, is the *Cabaña San Gregorio*, belonging to Señor Gregorio Villafañe; an Argentine who in strict justice ought to be mentioned as one of the first breeders in the country, on account of the intelligent efforts and pecuniary expenditure devoted by him to improving the breeds of cattle, sheep, and horses, during many years of personal labour.

Señor Villafañe's establishment is not of very great extent, its area being only 18,000 acres, but is notable for the great number of its pedigree cattle and the purity of type to be observed in his sheep. He devotes himself chiefly to breeding Durham and Hereford bulls, Lincoln rams, Hackney and Clydesdale stallions, collie dogs, fox-terriers, Brahmah fowls, Catalans, Dorkings, and Plymouth Rocks.

We must also mention the *Estancia San Pascual del Moro*, the property of Señors Adolfo and Rufino Luro. It is famous for its stud of race-horses, from which issued, in 1904, the great winner of the season, Old Man.

This long list of breeding establishments would still be incomplete indeed, did we fail to make special mention of the *Estancia Chapadmalal* of Señor M.-A. Martinez de Hoz, who has made the greatest efforts to raise his establishment to the level of the best European models.

"Equal to the best in Europe," was the judgment of a competent and impartial observer, Colonel Holdich, who, in his last book, entitled *Los Países del Fallo del Rey*, bestows upon it this well-merited praise:—

"A well-known estancia, that of Señor Michel-Alfred Martinez de Hoz, near the Mar del Plata, surprised me by the singular character of its surroundings. The soil, with its irregularities, had the look of an English park. Little

hills and knolls, one after another, stretched away, covered with their golden harvest, with soft undulations, to the precipitous borders of the sea; instead of the eternal barbed-wire fence, living hedges were already springing up, dividing the fields and the pastures. On the highest hillocks rose stacks of oats, carried up from the fields in the high-wheeled wagons characteristic of the country-side; and there the stacks were being rapidly built by hand-labour. It was a beautiful rustic scene.

"Lower to the right, on the softer soil by the banks of a stream, which descended babbling to the sea, through beds of rushes and buttercups, was a pasture; here, standing in the branches of the bank, were the Shire horses; they formed animated groups, and placidly watched our movements; they were the most magnificent examples to be found out of Lincolnshire. Further down still, on drier soil, was a troop of mares, of an English-Creole cross, with their foals. These animals were for draught, and the excellence of their breeding is proved by the registers of the Argentine Rural Society, which record the prizes awarded to the *Estancia Chapadmalal*.

"In a higher part of the estate, in a quarter reached through long avenues of poplars, which lead thither from the house, and where the ground is covered with forests of eucalyptus or willows, are the bulls and cows. The Argentine stock-breeder does not consider expense when it is a matter of importing good English cattle for breeding purposes. The chief estancia has a series of breeding bulls, which are led before the visitor, each by his special keeper, with the same pomp and ceremony as the stallions which precede them in the brilliant review. It is not only near the capital and the principal centres of population that we find these model estancias, which afford their owners every European comfort. They are to be found also in the extreme south of the country, in the solitudes of Patagonia, near the 50th degree of south latitude."*

"From the River Coyle, from Puerto Gallegos and Magellan Straits, to a point near Last Hope," says an Argentine traveller, Mr George J. McLean, who visited these

* Cf. *Annales de la Sociedad Rural Argentina*, No. 4, 30th April 1902, p. 159.

regions a few years ago, "the country is fairly peopled, and one comes across estancias, such as *El Condor*, the property of Messrs Wood & Waldron, an establishment of 337,500 acres, with a wire-fenced enclosure containing 160,000 sheep, equipped with forty steam shearers, with hydraulic presses, and sheep-dips warmed by steam calorifers. It is a common thing to find estancias, many of which are fenced with wire, feeding 40,000, 60,000 or 70,000 sheep. The most important are united by telephone, by which means they communicate not only with each other, but with Puerto Gallegos or Punta Arenas. I have spoken down these over a distance of 300 miles. In the Chilian portion of Tierra del Fuego, there is a telephone connecting Cape Dungeness with Punta Arenas, and also to the channels of Last Hope."

In the Territory of Santa Cruz is the *Estancia San Julian*, belonging to the San Julian Sheep Company. This "estancia" has an area of 296,000 acres—462·5 square miles—and contains 70,000 sheep, with an annual yield of 90 per cent. of lambs, or 63,000.

In the same Territory is another very prominent estancia, the property of the Patagonian Sheep and Farming Company Limited. This embraces an area of 471,000 acres—734 square miles—the area of a medium-sized English county.

Finally, in the same Territory is a vast property of 700,000 acres—1060 square miles—belonging to the Bank of Antwerp.

In the Territory of Chubut, which for some years has been a favourite locality for European capital and European immigrants, and which contains a large French colony, there is a very important estancia belonging to the Lochiel Sheep Farming Company Limited, which covers an area of 327,000 acres, and contains 35,000 sheep.

Another foreign company established in the southern part of the Argentine, "The Argentine Southern Land Company," possesses 1,518,000 acres of land, of which 859,000 are in the Territory of Rio Negro, and 659,000 in that of Chubut. This company was established in 1899, with a capital of £230,000, later reduced, on account of business misfortunes, to £140,000, which is the present capital. On this com-

pany's lands are 45,000 cattle, 40,000 sheep, and 4300 horses.

In all these establishments, and in many others which we are unable to cite, as it is difficult to obtain precise information concerning them, we find that, thanks to the intelligent efforts of their owners in seeking to import the best breeds of the most famous European breeding establishments, there are now many stallions, bulls, and rams of the purest blood and of great value, which are either imported or selected; and through these the general stock of the country has reached a very high quality of race.

All stock-breeders, even the smallest, are aware to-day of the great advantages to be obtained by crossing selected animals with sires of pure blood, and the result has been a great advance in the stock-raising industry. The statistics of importation show that in nine years, from 1899 to 1907, plus eleven months of 1908, there have entered the country from England, where the Argentine breeder usually seeks his stud animals, 10,040 bulls and cows, and 35,094 sheep. These two figures alone show the importance which the Argentine breeder attaches to the improvement of the breed of his flocks and herds. The prices paid for these animals are sometimes extravagant; in one case £3520 was paid for a bull; but land-owners willingly pay such sums in the certainty that such sires will bring them considerable profits.

The area at the disposal of the Argentine stock-raiser is still practically unlimited. We need only remember that of the 750 millions of acres which roughly represent the area of the Argentine soil, one-half, or some 375 millions of acres, are adapted to stock-raising.

Of this enormous area some 185 millions might be sown at once with cereals and fodder, notably in the coast Provinces, in Córdoba, and the Pampa, and there remains as much more for stock-raising, without taking into account the millions of animals that might be nourished by intensive culture in the cultivated zone. This extension would allow of the existence of 40 million cattle and 200 million sheep.

Results of the Census of Stock taken in 1908.

What is the amount of stock at present in the Argentine Republic? We are in a position to answer this question, one of the present writers, Señor A. B. Martinez, having been appointed Director of the last agricultural and pastoral census, which was taken during the first fortnight of May 1908, according to a law passed by Congress. The work which sums up the results of this important undertaking is in three volumes, and is at present in the press; thanks to which fortunate circumstance we are able to anticipate its publication, and to give our readers the benefit of this investigation.

The census of agriculture and stock-raising, undertaken over the entire territory of the Republic, has revealed the existence in Argentine territory of 29,116,625 cattle, 7,531,376 horses, 465,037 mules, 285,000 asses, 67,211,754 sheep, 3,945,086 goats and 1,403,591 swine.

If we compare these results with those of the two previous censuses, that of 1888 and that of 1895, we obtain the following table:—

CENSUS.		Cattle.	Horses.	Sheep.	Swine.
1888 ...	...	21,963,930	4,262,917	66,701,097	403,203
1895 ...	...	21,701,326	4,445,859	74,379,562	652,766
1908 ...	...	29,116,625	7,531,376	67,211,754	1,403,591

We see from these figures that in twenty years, between 1888 and 1908, the number of cattle has increased by 7,152,695 head; and in thirteen years, between 1895 and 1908, by 7,415,099 head. The number of horses has increased by 3,268,459 between 1888 and 1908, and by 3,085,517 between 1895 and 1908. Sheep have increased by 510,657 between 1888 and 1908, but decreased by 7,167,808 between 1895 and 1908. Swine, far from numerous if we compare their numbers with these obtained from other countries, present a continual increase: 1,000,388 between 1888 and 1908, and 750,825 between 1895 and 1908.

The decrease of 700,000 in the numbers of sheep in thirteen years is in keeping with what has been observed in the principal wool-producing countries. Authorities assure us

that of the 400 millions of sheep which existed in various parts of the world in 1873, there remain to-day barely 300 millions. In Germany, for instance, to go by the *Journal des Économistes*, the number of sheep has dropped from 19 millions to 7 millions in a space of twenty-five years.

The causes of this constant diminution are numerous. First of all we will take the development of agriculture, which has expelled the sheep. According to an eminent collaborator in the census, "The sheep has to walk, must walk far and wide, must walk always, in order to eat sufficiently—unless he does so, his food will be too costly; he is essentially a vagabond, and he consequently requires a great space and continual supervision."* For these reasons the European small farmer prefers, if he can, to keep one or two cows in his cow-shed and suppress the sheep entirely.

Sheep-breeding really gives encouraging results in regions where the area of the soil and the prairies is out of all proportion to the number of labourers available for its culture. Land given up to sheep cannot support the high rents paid by the producers of cereals; this is the principal cause of the decline of sheep-farming all the world over.†

* Probably the sheep would pay better if kept more as cattle are kept. The theory of long marches only applies to enormous flocks, so thick upon the ground that they must walk miles a day, eating all the time. If the whole herd of sheep on a large sheep-farm were divided into many small flocks, and the farm into, say, ten times as many pastures, each flock might be turned for two days into each pasture, so that it would have three weeks' growth on it before the flock returned: or, if large enough to feed the sheep twenty days, it would have twenty weeks in which to recover—time to grow a crop of leguminous fodder, after which a splendid crop, or series of crops, of cereals could be grown upon it. Under such a system the sheep would wander less, fatten quickly and be more tender. English sheep-farming is on an infinitesimal scale, but the profits from a small flock changed from pasture to pasture are often very considerable.—[TRANS.]

† Other causes are: the invention of mixtures of cotton and wool; the use of silk and mercerised cotton: and the production of cellular or netted cotton and linen underclothing, which is healthier and cheaper than wool, and equally warm; also the improvement of wool-bearing breeds, through which fewer sheep will produce the same quantity of wool. The export of cheap beef from America is another active factor.—[TRANS.]

The following table gives the total number of beasts of various kinds, classed according to purity of breed:—

Species.	Pure.	Cross-bred.	Native.	Total.
Cattle ...	984,897	13,060,446	13,071,282	29,116,625
Horses ...	49,000	1,693,637	5,788,739	7,331,376
Mules ...	—	—	465,037	465,037
Asses ...	—	—	285,088	285,088
Sheep ...	1,179,482	55,448,749	10,583,523	67,311,754
Goats ...	3,321	129,800	3,816,965	3,945,086
Swine ...	34,462	589,126	780,003	1,403,591

In the matter of cross-breeding the Argentine has made astonishing progress, the proof of which is to be found in the comparison of the figures for 1895 with those of 1908. It is enough, for our purpose, to mention that in 1895, in the Province of Buenos Ayres, out of 100 cattle, 6 per cent. were of pure blood : 49·2 per cent. were cross-bred, and 50·2 per cent. were of native breeds; and that thirteen years later these figures were transformed into 6·2 per cent. of pure blood, 85·1 per cent. of cross-bred cattle, and 8·7 per cent. of native breeds. This improvement in the Province of Buenos Ayres is repeated in the other more productive Provinces, and in the case of other species of animals.

We have stated that the number of cattle in the Argentine Republic is over 29 millions; this number may be analysed, according to sex, age, etc., in the following manner:—

Year 1908.

Male calves ...	...	...	...	3,820,443
Heifers ...	...	...	...	3,511,412
Bulls ...	...	...	...	886,450
Bullocks ...	...	...	...	4,687,027
Cows for breeding ...	...	...	...	12,825,904
Milch cows ...	...	...	...	2,163,900
Oxen ...	...	...	...	1,221,489
				<hr/> 29,116,025 <hr/>

It now remains to consider the value of the animals registered as existing in the Republic in the year of census 1908.

In 1895 this value was estimated at 1,136,780,411 piastres (paper), which with the exchange at 300 per cent. was equivalent to 378,926,803 piastres (or dollars) in gold, or £75,785,360, 12s., while the latest census gives a value of 1,481,282,245

piastres in paper, which with exchange at 2·27, is equivalent to 651,764,187 piastres in gold, or £130,352,835.

If now we analyse these figures, dividing them among the various species of animals, as given by the censuses of 1895 and that of 1908, we obtain the following table :—

Species.	1895.	1908.
Cattle	£44,568,493	£82,604,353·4
Horses	5,099,281·4	18,112,761·4
Mules	666,159·6	1,985,374·6
Asses	131,914	251,235
Sheep	24,525,101	25,287,598·6
Goats	389,139	732,322
Swine	405,272	1,379,192
	<hr/> £75,785,360	<hr/> £130,352,837

We see from this that, in spite of the moderate valuation of the stock in 1908, its value had increased, in thirteen years, by nearly £54,600,000.

Knowing the numbers and the value of the live stock of the Argentine Republic, a last question arises of the highest interest. What place does the Argentine hold among those nations in which stock-raising has reached its highest development ?

To answer these questions, we have resorted to the most authoritative publications available, with the result that we are enabled to draw up the following table :—

STATES.	SPECIES.			
	Cattle.	Horses.	Sheep.	Swine.
The Argentine Republic	29,116,625	7,531,376	67,833,112	1,403,501
The United States	69,438,758	21,216,888	61,837,112	64,694,222
Canada	5,376,451	1,577,493	2,510,239	2,353,828
Australia	9,349,409	1,765,186	83,687,653	813,569
Cape Colony	2,000,000	300,000	11,800,000	400,000
India, Burmah, E. Indies, etc.	91,700,000	1,300,000	18,000,000	—
European Russia	39,000,000	22,600,000	42,900,000	11,200,000
Germany	20,600,000	4,300,000	7,700,000	22,100,000
France	14,000,000	3,200,000	17,500,000	700,000
Austria	9,500,000	1,700,000	2,000,000	4,700,000
Great Britain	7,000,000	1,600,000	25,400,000	2,700,000

This table shows us that, in the matter of cattle, the Argentine Republic holds the third rank ; it is also in the third rank in the matter of horses ; in the second rank in the

matter of sheep; and in the matter of swine she holds one of the lowest ranks.

If we compare the Argentine with the United States in particular, the contrast is striking; while in North America the value of all bestial reaches the colossal sum of £664,800,000, in Argentina it amounts only to £130,400,000, distributed as follows:—

Species.	Numbers.		Values.	
	United States.	Argentine Republic.	United States.	Argentine Republic.
Cattle ...	69,438,758	29,116,625	£315,660,088	£82,604,353
Horses ...	21,216,888	7,531,376	218,601,571	18,112,761
Sheep ...	61,837,112	67,211,754	35,571,250	25,287,598
Asses ...	111,450	285,088	1,412,307	251,235
Mules ...	3,445,029	465,037	43,239,935	1,985,374
Swine ...	64,694,222	1,403,581	49,657,202	1,379,192
Goats ...	1,949,005	3,945,086	707,865	732,322

Consequently the Argentine is far from achieving the wonderful results obtained by the great northern Republic of America;* for that matter, she could not compare with the States, having only 6,000,000 inhabitants to the latter's 86,000,000; and her wealth is equivalent only to a small fraction of the colossal wealth of the States. Yet an examination of the above figures is encouraging, for in view of the progress accomplished before the previous census, the Argentine may justly regard her flocks and herds with pride, and continue to increase them, thanks to her climate, the fertility of her soil, and the energy of her inhabitants.

* It must be remembered that of two beasts of equal purity of breed, and in perfect condition, the Argentine would be reckoned as being of the lower value. The reason of this is economic and very simple. The Argentine bullock is affected by competition and pays tribute to the breeder, the railway company, the refrigerating company, the shipping line, the European buyer or salesman, and the retail salesman. Consequently it is worth less in the Argentine than in the States, where the selling-price is artificially inflated, and where the value of a beast to the breeder, since he has only to pay freight and the profit of a large company, which is sometimes the breeder and the railway company too, is naturally far greater. It must not therefore be supposed that because the Argentine horse or bullock is cited as of lower value, that it is inferior. Its value is lower, just as good land in the Argentine is cheaper than in New York State.—[TRANS.]

CHAPTER IV

THE VALUE OF THE SOIL

Difficulties in estimating this value—Principal factors of valuation—Examples taken from lucerne fields and the forests of quebracho—Despite adverse circumstances, and with a few exceptions, there has always been a tendency for the price of land to rise—Alienation of lands acquired by conquest from the Indians; their enormous present value—The rise of value dates from 1902, and has hitherto continued without relapse—The causes of this rise, and its rational principles, according to an authoritative opinion.

Examples of valuation drawn from the sales of public lands—The rise of prices in the Provinces of Buenos Ayres, Córdoba, Santa Fé, and the Pampa, with figures indicating the prices realised in some large recent transactions.

NOTHING is more difficult than to determine the value of land in a country in the course of formation, like the Argentine Republic, in which it undergoes considerable increase from one moment to another; not only on account of general progress, but also from special reasons, such as good harvests, the construction of a railroad, etc. In the same region, in the same district, two neighbouring tracts will often have a different value, accordingly as they have or have not a permanent water-supply, or as they are more or less adapted to agriculture, nearer to or further from a railway, a station, or a centre of population.

For some years now, two new factors of valuation have come into being: the culture of lucerne and the planting of quebracho wood.

Since farmers have known of the enormous—the fabulous—profits to be derived from fields of lucerne, every buyer of land inquires first of all if there is water available; that is, if the subterranean water-level is near the surface; as on that factor depends the existence of the lucerne pasture for many years.

If upon investigation it is found that there is water the land, by this sole fact, acquires an enormous value in comparison to what it would be worth if it were unfit for lucerne.

An important newspaper, published in Buenos Ayres in the English tongue, the *Standard*, has shewn that the price of land in Victoria (Australia), where the acre is worth from £4, 6s. to £9, compared to the prices paid for land in the Argentine suitable for sowing lucerne (that is, in the south of Córdoba and San Luis, where there are no invasions of rabbits, where there is no drought, and which are half-way, so to speak, to the European markets) proves, by comparison, the low value of Argentine land. Even when near a railway, such lands may be bought for 17s. 6d. or £1 per acre.

In proof of the above affirmation, the *Standard* has made the following calculation: Let us suppose an expense of 6s. 5d. per acre for the expenses of sowing and cultivating an acre of soil (including sowing it with lucerne at £2 per cwt.), it follows that the acre costs from £1, 3s. to £1, 8s., and the square league of 6175 acres (representing the work of eighteen months) about £7920. Adding £880 for fencing and watering, we find the price of the square league (9·648 square miles) amounts to some £8800.

What, according to the *Standard*, is the profit to be drawn from this square league? It will fatten some 4500 head of three-year-old cattle, which may be bought at £4, 8s. per head, and seven months later sold at £7, 18s. 6d.; this will give a profit of £3, 10s. 6d. per head, or a gross profit of £15,862. Deducting £7040 * for expenses (allowing freight to the extent of 10s. 6d. per head), there remains a net profit of £8800 per league per annum, or 100 per cent. on the outlay. If such are the results to be obtained from the transformation of an uncultivated tract of land into a lucerne pasture, it is not surprising that rural property is so quickly attaining so high a value.

In the case of quebracho—a very hard wood which is useful for building and constructive purposes, and from which an excellent tannin can be obtained—matters are much the same. Having had experience of the large profits to be derived from the manufacture of quebracho extract, and the splendid dividends paid by the companies engaged in the

* Apparently made up of half the cost of the lucerne pasture, plus freight and labour; as two sets of beasts can be fattened in a year or a little over.—

work, men of business, anxious to invest their capital to advantage, hastened to acquire forests of quebracho, with the result that the price of such land suddenly rose to a level hitherto undreamed of. Tracts situated in the Chaco—a region where quebracho abounds—which were selling a year previously for £88 the square league of 9648 square miles, rose in price to £880, and this latter price can by no means be considered as a definite maximum.

What is true of lucerne and quebracho is also, though on a much smaller scale, true of linseed or wheat, when after an abundant harvest the land-owner or farmer procures the requisite capital for the purchase of the land he has been cultivating and pays a good price for it. There are here elements which confound all calculations made in advance, and make it difficult to fix even an approximate value on the soil.

At the present moment there is no basis for such a valuation. A farm selling to-day at 20s. per acre, may to-morrow sell for 26s., the day after to-morrow for 32s., and so on, until prices are reached which astonish the first vendor, and give him the melancholy conviction that he did ill to part with his land. For this reason, the best thing one can do to-day is to hold on to the land.

The value of rural and urban property has gone on increasing more and more rapidly for more than forty years; and although there have been great fluctuations in prices, the rise has always been constant in the long run; owing to the increase in the population, the consolidation of political institutions, the construction of far-reaching railway systems, the prodigious development of international traffic, and, as a natural consequence, the great increase of public wealth.

To gain an idea of the entire significance of this increase in values, we must go back to the more than modest prices of rural property which ruled before the later development of the upward movement. It is enough to recall the fact that in 1879, with the object of procuring funds in support of the expedition which General Roca was leading against the Indians of the wilderness, an expedition which resulted in the conquest of 226,800 square miles of territory, the Government offered for sale an enormous tract of land at

the price of £80 the league (about £9 the square mile), the purchase-money to be payable over five years. But the devaluation of these lands was so great, and faith in their remunerative possibilities so inferior, that very few accepted the offer. Many did so rather as a patriotic loan than as a serious investment. Others did so as a mark of personal deference towards the men who were at the head of the Government. But all have been abundantly rewarded, since much of the soil which they were able to obtain at £35 the league is selling to-day at £26,000 and £35,000. More than one of the great private fortunes in the country had no other foundation than this.

This depreciation of rural property continued still unchanged for a dozen years; so much so, that in order to tide over the crisis before the crash of 1890, the Government, which so disastrously handled the affairs of the nation, had the evil inspiration to offer for sale in Europe, by virtue of the law of October the 15th, 1889, those very 24,000 leagues of land obtained by conquest by General Roca's expedition. The sale was to be effected at the figure of 10 francs per hectare—about 3s. 3d. per acre!—payable half upon purchase and half at the end of two years. No limit was set to the powers of purchase of any one buyer; each could buy just as much as his purse would allow. The law, in palliation of this incredible operation,* promised to apply the whole product of the sales to the fund for converting the issue of the guaranteed bank-notes of famous memory. Providence, happily, which more than once has taken the Argentine under its especial protection, prevented this disastrous alienation of territory from taking place. Had it been otherwise, the Republic would have sold for a mess of pottage a magnificent portion of her territory, a country large enough to house more than one European nation, and which to-day perhaps would be in the hands of a company or a foreign government—a new state within the State.

The depreciation of rural property continued for some

* It must be remembered that this tract was four and a half times the size of England!—and this enormous country, in the heart of the Argentine, was offered for sale to foreigners! The process of buying it back when the terrible folly of the act was once obvious, would have been equivalent to making the country tributary for years, and for enormous sums, to Europe.—[TRANS.]

years. Thus, in 1897, the Government sold by tender to the highest bidder a large portion of its best lands, at the price of 3750 piastres, or £330 the square league (about £36 the square mile), payable in five years, with permission to pay in bonds of the patriotic loan, which then stood at about 75 per cent.*

This situation continued until 1902—a year which saw the settlement of the old question of the Chili-Argentine frontier; a year of abundant harvests and enormous development in the stock-raising world; a development which took shape first in the export of cattle on the hoof and then in the despatch of great quantities of chilled or frozen meat to the English markets; a year which also saw the advent of a financial stability resulting from the “law of monetary conversion,” which gave a fixed value to paper money, the medium of all commercial transactions in the interior. Then came a steady and decisive rise in the value of landed property in general and of rural property in particular.

Since the beginning of this movement the value of the soil has steadily increased; the last price is always greater than the previous one, although the latter may have appeared stationary, if not final. This being the case, we ought to ask whether this general rise responds to permanent and sufficient causes, or if it is only the result of capricious speculation, affecting landed property now as at another time it affected paper money.

In reply to this question, Señor Roman Bravo, one of those Argentines who are most familiar with all the complex aspects of land valuation,—for he is the Director of the house of business† which transacts the greater proportion of such operations—has at our request summed up, in the following terms, the causes which at present determine the increase in the value of property:—

“The economic life of the country offers at each step signs of further progress. The enlargement of ports, the extension of railways, the dredging of channels, the

* The piastre note was then worth 1 franc 71—1s. 4·4d., or 34·2 per cent. of the par value. It was later fixed by law at 44 per cent.—[TRANS.]

† The sales by auction conducted by this house during the first six months of 1905 amounted to £2,376,000.

development of the building trade in the chief city of the Republic, all show the spirit of enterprise at present animating the individual and the people. Commerce and vigorous industries reinforce these elements of prosperity and welfare.

"But it is in matters of land purchase that we best perceive the material expansion and the intensity of the forces in action. Without going back to the year 1904, we have only to consider the transactions of the last few years to realise that, both in the capital of the Republic and in the national Territories and the Provinces, the period has been a fertile one in the matter of transactions in landed property. There has been no more active period since 1889; and this time the facts have an explanation, a natural and logical sanction. Agriculture and stock-raising have so augmented the sources of national wealth that in a few years the balances in favour of the country have reached the figure of nearly £20,000,000. This is the effective cause of the increased value of the land: to which we must add the confidence which we all feel in the gradual development of the forces which labour has released, to the benefit of public tranquillity."

One of the most surprising examples of the increased value of the soil, and of the interest awakened by sales of land, is to be found in the public and official auction of national lands which took place in the month of April 1905.

These sales were to be effected on account of those who had bought these lands in analogous circumstances in 1897, and who had not paid for them during the delay stipulated by the law. The whole surplus over the price established by the previous sale, less deductions for interest and other expenses, went by law to the original purchaser. The auctions were conducted in the presence of a crowd of speculators, capitalists, and labourers, eager to invest their money in so remunerative a speculation, since in the Argentine all are convinced that the purchase of the soil is the best form of saving. The result of the sale was that in many cases double the original price was obtained; three times the price in some cases, and in some five times the original price was realised.

In the Territory of Pampa Central an area of 933,680

acres was offered for sale, the previous price being £49,693; the sale price was £135,297, representing an average price of £842·6 per league, or 2s. 8·7d. per acre.

In the Territory of Chubut, 265,278 acres were put up to auction, the original price being £5243·5, and the sale price £25,361·6, or an average of £590·28 per league, or 1s. 9·7d. per acre.

In the Territory of Santa Cruz an area of 98,800 acres was put up for sale, the first price being £3391·34, and was sold for £9477·6, or 1s. 10d. per acre.

In the Territory of Chaco, in which especial interest was felt, as the lands in question bore forests of quebracho trees of great value (the quebracho industry being then in vogue), higher values were obtained, representing five times the original sale price. The lands to be sold in this Territory represented a surface of 123,500 acres, and were first disposed of for £4948. However, a price of £24,170 was obtained, representing an average of £1208·24 per league, or 4s. 6·9d. per acre.

In the Territory of Rio Negro 74,100 acres were put up for sale, which were previously sold for £3058. They realised £8712, or £726 per square league, or 2s. 4·2d. per acre. The general result of the sale was that the Government did a splendid stroke of business; but the transaction was still more to the profit of the fortunate first applicants, who, for failing to comply before a given date with the conditions established by law, were rewarded by receiving the price of sale less the price at which they bought; sums which to many of them represented a considerable fortune.

Since that period the value of land has continually increased, as we see from the following information, which was given us by the "General Bureau of Lands and Colonies" of the Ministry of Agriculture. In 1906 and 1907, this Bureau sold by public auction a large section of public lands, and the prices obtained were far higher than those we have recorded above.

In the Territory of Rio Negro, in August 1906, 497,600 acres were sold at an average price of 9s. 8d. per acre.

In March 1907, 314,974 acres of land, situated in the

Peninsula Valdez (Chubut) found a buyer at 6s. 7 $\frac{3}{4}$ d. per acre.

Numerous sales were effected in 1907 in the Pampa Central. Among others, we may cite the following: 18,520 acres sold at 10s. 6·7d. and 4640 at 10s. per acre; a lot of 18,750 acres at an average price of 6s. 9·7d.; 7500 at 6s. 5d.; 151,410 acres at 4s. 4·8d.; 1235 acres at 3s. 7·6d.; and 12,350 acres at 3s. 11·3d. per acre.

In October of the same year, auction sales were held in various portions of Pampa Central, the results being as follows: 16,425 acres at 8s. 10·24d.; 5390 at 8s. 2·3d.; 40,137 at 10s. 3d.; 24,700 at 7s. 4·3d.; 306,050 at an average price of 3s. 8·5d.; 24,700 at 3s. 7·8d., and 9182 at 6s. 7·8d. These examples are given to show the variety of actual prices, according to the situation and the yield of the land.

In the matter of private sales, it is difficult to keep track of rising values on account of the number of sales which take place every day. We will try, however, to give a few examples, to arrive at some approximate value of the Argentine soil in the year 1905.

The Province of Buenos Ayres, which is the most thickly populated and the wealthiest in the Republic, is also that in which rural property has reached its highest value. In the district of Lobos, a few hours from Buenos Ayres, a field of 170 acres, known as the Atucha Meadow, was sold for £26, 7s. 2d. per acre; another of the same area for £59, 8s. 9d. per acre; another of 635 acres for £12, 1s. 0d. per acre, and another of 587 acres for £14, 4s. per acre.

In the region of Rojas, also some hours from the Federal capital, the land on which stood the "San José," "Santa Barbara," and "La Matilde," establishments belonging to Señor Roberto Cano, and whose area was 15,800 acres, was sold for an average price of £8, 8s. per acre.

In the neighbourhood of Dolores, not far from Buenos Ayres, a meadow belonging to the "Montes del Tordillo" estate, composed of 18,850 acres, was sold for 19s. 1·4d. per acre. In the section of Lincoln 10,000 acres were sold at prices varying from 48s. to £5, 2s. per acre. At Trenque Lauquen, one of the belts of land in Buenos Ayres which has seen the most rapid rise in values, sales have been effected of 22,000

acres at prices rising from £1, 18s. to £3, 6s. per acre, the average being £2, 8s.

In this same section, some 8 miles from the railway station of Primera Junta, 1976 acres were in 1907 sold at prices varying from £2, 8s. 3d. to £5, 12s. 9d. At General Pinto the land belonging to the "Filadelfia" estate, 23,198 acres in extent, was sold at an average price per acre of £2, 2s. 9d.

In the department of Olavarria 19,856 acres were sold in 1908 for prices varying from £3, 7s. 8d. to £7 per acre, the average being £5.

In the department of General Conesa, 11,085 acres, facing the Bay of São Borombon, and 23 miles east from San Dolores, found a buyer at an average price of £1, 3s. 4d. per acre. In the department of Coronel Pringles, the establishment known as El Bombero, situated some 19 miles to the west of Tres Arroyes, divided into thirty-one lots of from 370 to 4940 acres, was sold at prices running from £2, 1s. 1½d. to £4, 2s.

Among these sales of 1908 which attracted most attention were those transacted in the Province of Buenos Ayres. These included a tract at Exaltacion de la Cruz of an area of 914 acres, near the railway station of Cardales, which, sold in small lots of from 58 to 180 acres, obtained an average price per acre of £29·6 per acre. At Lomas de Zamora the land of the establishment "Santa Ines" were sold to the Sansinena Company for £13, 3s. 6d. per acre. In the department of Azul, a meadow known as "La Vanguardia," of an area of 2080 acres, 11 miles from the town of Azul, found a buyer at £7, 16s. per acre. The San Miguel estate, near the Manzanares railway station, subdivided into thirty-six lots, was sold at an average price of £10, 5s. per acre. On the 19th of August 1908, in the same department, 741 acres fetched a price of £12, 9s. 2d. per acre. At General Belgrano, less than 2 miles from the railway station, 3294 acres, divided into five lots, were sold at prices varying from £8, 11s. to £10, 13s. 10d. A tract of 499 acres about 1000 yards from Jeppener Station, in the department of Brandzen, was sold at the rate of £12, 5s. 9d. Finally, at Burzaco, at a distance of 2500 yards from the station, 494

acres of land attained the fabulous figure of £42, 15s. per acre.

These are high prices in comparison with those ruling formerly, and at present they are firmly maintained.

The prices of lands suitable for agriculture vary greatly, according to their distance from the great city of Buenos Ayres or the port of Bahia Blanca, and their proximity to a railway station; accordingly as they have water near the surface, and are thus adapted to the growth of lucerne; and according to the terms of payment granted by the vendors. There are, of course, other factors as well.

Among many other examples, we will cite the 588,050 acres of land at Curumalan, ten hours from Buenos Ayres, the property of a syndicate which bought them in 1903 from Messrs Baring Bros. of London, at a price of £807,575. Up to July the 1st, 1905, this company had sold more than 247,000 acres of land directly to agriculturalists—Russian for the most part—at prices varying from £2, 10s. 8d. to £3, 4s. 1d., allowing them a term of three or four years for payment, plus an interest of 8 per cent. per annum.

The Province of Córdoba is, after the Province of Buenos Ayres, that in which the land has most rapidly risen in value. Transactions in rural property are very numerous and represent an important figure. In the five years from 1899 to 1903, about 9,386,000 acres have changed hands, and in 1904 alone 3,820,830 acres were sold.

It is difficult to give an account of these transactions by reason of their number; but to cite only the most important, we may mention a block of 61,750 acres in the department of Juarez Celman, belonging to Alejandro Roca, which was sold at public auction in the early part of 1905, at prices varying from 17s. 10½d. to £2, 6s. per acre. In view of the prices which the buyers realised later, they made a splendid bargain; none of them sold for less than double what he gave. In the Union department of the same Province, 59,904 acres were sold at prices varying from 13s. 3d. to £1, 16s. 11d. per acre.

Another important sale, effected also in the early part of the same year, was that which took place in the department of Tulumba, fifty miles from the colony and railway station of Morteros on the Central Argentine railway. The block

sold comprised an area of 20,826 acres, and the prices obtained varied from 1s. 5·8d. to 2s. 2d. per acre.

In the Province of Santa Fé, the appreciation of land values has of late years been neither so great nor so rapid as in Buenos Ayres and Córdoba; the reason being that it was this Province which initiated the colonising movement in 1856, by the foundation of the Esperanza Colony, so that its land values had already undergone sudden augmentations in previous years. In the five years from 1899 to 1903, the sales have amounted to £5,831,160 acres, and in 1904 to 2,026,420 acres. In the department of General Lopez 23,487 acres were sold for prices varying between 2s. 4d. and £2, 18s. 3d.

We may also note a tract of 8204 acres, 8 miles from La Serna railway station, which in 1908 was sold for £1, 12s. per acre.

The Provinces of San Luis and Santiago de l'Estero were the last to take part in this movement of appreciation of land values. The former, in especial, has from this point of view been a revelation to every one. As soon as it was discovered that the soil of this Province was admirably adapted to the formation of splendid meadows of lucerne, its value rapidly rose from 1s. 5½d. to 6s. 5·7d., 12s. 11d., and 19s. 5d.

We must, in particular, mention a meadow known as the "Agualapada," 98,000 acres in area, which on the 27th of July 1908 was sold at the rate per acre of 5s. 4d. 53,219 acres of land, some 13 miles from the railway stations of Nueva Galia and La Fortuna were bought at an average price of 10s. 3d. per acre. In the department of Pedernera 16,043 acres, divided into five lots, found purchasers at prices varying from 16s. 2d. and £1, 1s. 2d. to £1, 15s. 9d.

But, as we have already said, it is in the Pampa—in that vast country of 56,170 square miles in area—larger than England—which was incorporated in 1880, after the expedition led by General Roca—that the most surprising examples of appreciation are to be found. There all is undergoing a continual transformation; each year the plough opens wider furrows for the seed; the sowing of lucerne is rapidly increasing; stock-raising establishments are to be found in

the very confines of the country; and a large network of railways, in operation, in construction, or under consideration, promise to surround it on every hand, to circulate its products and to facilitate exchange. All these wonderful transformations are being effected under our eyes, day by day; so that it is not surprising that the value of the soil follows this tide of energy.

In the Pampa Central, of late years, we have seen land suitable for lucerne, with water 10 to 30 feet below the soil, not far from populated centres, and with means of rapid communication, fetch prices which quadrupled those it had touched eighteen months earlier, selling for as much as £3, 11s. 3d. per acre. In more than one case land which was bought for £880 the square league was afterwards sold for £8800.

Among the sales of 1908 was one of a meadow of 18,525 acres, six miles from Utracan Station, which, sold by order of the law, fetched a price of 17s. 10d. per acre. In another part of the same Territory 7698 acres were sold in a single lot, on the 1st of October 1908, at the rate of £1, 4s. 7d. per acre. In the Alfalfa Colony, during an auction sale, several *chacras*, or small farms, attained prices varying from £1, 19s. 3d. to £2, 2s. 9d. per acre.

By the Catrilo railway station on the Western Railway, situated in the same Territory of El Pampa, is a field whose owner, M. Mathias R. Sturiza, was offered £61,600 for it; two years earlier he had bought it for £5280.

Competent authorities assure us that in the neighbourhood of Santa Rosa de Toay, the capital of the Territory of the Pampa, the value of the fields has been shown by recent sales to have increased by 300 per cent. In the department of Victoria, in the same Territory, fields which a while ago were offered at 2s. 1·5d. per acre, are to-day selling for £1, 1s. 4d.—ten times that sum.

Such are the chief manifestations of the economic phenomena of the appreciation of land values; one of the most interesting of the problems which present themselves to the observer of the modern Argentine Republic. Is it a true symptom of national vitality, or must we see in these data the warnings of a period of commercial crisis, characterised,

according to the learned economist Juglar, by the rise of all values and by frantic speculation?

Events, which unroll themselves amidst our feverish Argentine activities far more rapidly than in other countries, will not be long in giving us the answer to these questions.*

* The importance of the sales of rural property is to-day so great, and speculation so eager, that the prices given here, according to information gathered barely a few months ago, appear to us already as ancient history.

CHAPTER V

AGRICULTURAL INDUSTRIES

SUGAR-CANE—Area of plantations—Statistics of production—Legislation affecting sugar—Consumption.

VINES—Area of vineyards planted—Production, consumption—Imperfect quality—Competition of foreign imports.

TOBACCO—Area of plantations—Value of the product—Defective preparation.

THE MULBERRY—The culture of the silk-worm might be established in the Argentine, but at present exists only in an experimental condition.

MATÉ—Large consumption of this product.—Statistics of foreign importation—Districts suitable for its growth.

COTTON—Physical conditions proper to its growth—The first favourable results in the Argentine—Its introduction into Chaco—Lack of manual labour for the development of this industry.

RUBBER—Existence of rubber plants in the Argentine—An unexploited source of wealth.

ARBORICULTURE—On account of the diversity of the climate, all fruit-trees can be grown in the Argentine—The various fruits cultivated in different regions—Amelioration of the products. The trade in fruit—Its development possible on account of the inversion of seasons as compared with Europe—Refrigeration applied to the transport of fruit—Regions particularly suitable for fruit-growing.

BESIDES the culture of cereals, such as wheat and maize and linseed, and the important grazing and cattle-breeding industries of the Argentine, together with their dependent industries, there are other forms of agriculture and forms of natural produce, some of which have already attained a great importance, while others are destined to become equally important in the near future; that is, if the progress of evolution in the Argentine follows, as there is reason to hope, its natural upward course.

Sugar-cane.—Among the agricultural industries the culture of the sugar-cane assumes the first rank. The cane is cultivated principally in the Province of Tucuman, in which Province are established the greater number of the sugar factories existing in the Republic. The cane is also

planted, and flourishes, in portions of the Provinces of Santiago, Salta, and Jujuy; in the north of Santa Fé, in Corrientès, and in the Territories of Formosa, Chaco, and Misionès.

Sugar-planting is an industry of considerable antiquity in the Argentine; but it has attained a remarkable development chiefly in the last ten years, owing to the high price of sugar and the establishment of numerous factories equipped with perfected machinery; owing also to the notable profits which the industry offers.

The result has been an excess of production, which led the industry into a dangerous crisis, from which it is now in a fair way to recover. Those who suffered the most were those who had abused their credit by building expensive factories and laying down costly plant; and those who had planted sugar in soils unsuited to its culture, or in regions of unfavourable climate, or where the means of transport were insufficient.

The total area cultivated in 1907 was estimated at about 172,900 acres, of which 14,029 were in the Province of Tucuman; 11,115 in Southern Chaco; 6916 in Salta; 3952 in Jujuy, and 2717 in Santiago de l'Estero; the rest being divided among various other regions of the Republic; these figures representing an increase of nearly 24,000 acres over those of 1895. These 172,900 acres of cane give an average yield of 30 tons of sugar per hectare, or 11·727 tons per acre, representing a total yield of 132,160 tons of sugar.

The greatest number of sugar refineries are to be found in the Province of Tucuman, where there are thirty-two. In the other sugar-growing districts there are only thirteen, which are distributed as follows: Three in Jujuy, two in Santiago de l'Estero, one in Salta, one in Misionès, six on the banks of the Parana River, two in Santa Fé, two in Corrientès, one in Chaco, and one in Formosa.

The net cost of producing the cane, ready for delivery, is about 5 to 7 centavos* per 10 kilograms. Taking as

* The centavo is $\frac{1}{100}$ or ·01 of the piastre. In metallic currency it is equal to the American cent, and nearly to the English halfpenny; in paper it is worth a little over one-fifth of a penny = ·22727 pence.

basis a yield of 30,000 kilograms per hectare and a sale price of 12 centavos, the growers would make a net profit of 140 piastres per hectare; or, with the value of the piastre note at 2·2 francs, of £4, 2s. 6d. per acre. Thus sugar-planting is a profitable industry under normal conditions.

The outgoings and receipts on an acre of soil planted with cane may be estimated as follows:—

RECEIPTS.						
By sale of 12 tons of cane, at 12·8d. per cwt.	...	...	...	...	...	£12 16 0
EXPENSES.						
<i>Cost of Planting—</i>						
Tilling and preparing soil	...	...	...	...	...	£0 9 11
Lining out and fixing shoots	...	...	...	...	...	0 16 4
Shoots, preparation, etc.	...	...	...	...	...	0 12 9
<i>Cost of Harvesting—</i>						
Cutting 12 tons of cane	...	...	...	...	...	0 14 2
Preparing the cane	...	...	...	...	...	0 14 2
Transport to factory and extras	...	...	...	...	...	2 13 5
Interest on the land, or rent, taxes, and redemption	...	...	...	...	...	1 1 3
						£7 2 0
						12 16 0
Net profit						£5 14 0

With an increased consumption of sugar, the culture of the cane will occupy a far greater area of the belt in which it is already established. It is, however, limited by the interests of the manufacturers themselves, who limit production in order to keep up the price of sugar, and so obtain higher profits; sugar of native preparation being protected by laws which strike at the importation of foreign sugar.*

* This is an interesting object-lesson in the working of a tariff. Foreign competition once abolished by the increased prices of foreign articles, the native manufacturer will always minimise, and even destroy, the protection afforded by the tariff, by increasing his own prices. If he cannot do so naturally he will do so by lessening his output; with the result that sooner or later the tariff will actually increase foreign imports and still further limit home production. Obviously the only circumstance under which it can permanently profit even the manufacturers is this: a tariff so high as to make importation ruinous; when the home producer will raise his prices until they are just below the line of unprofitable inflation; which, from the context, would seem to be the case in the Argentine. The consumer must suffer, and usually the *employé*.—[TRANS.]

In 1907 2,498,000 lb. of foreign refined sugar were imported, their value being £181,755; but on the other hand 140,370 lb. were exported during the same year.

It is to be hoped that the price of sugar will not fall too low, as this might bring about the ruin of an industry which is worth encouraging and preserving: but it is essential, on the other hand, to oppose an excessive inflation, which would diminish the consumption of this valuable alimentary product, and would force the consumer to pay the exaggerated profits of a small number of manufacturers and planters. This is the inherent peril of excessive protection.

The law of 23rd January 1904 and the regulation of 25th October of the same year have provided for this condition. One must not forget that all commerce is conditioned by the law of supply and demand, and that to avoid overloading the market with produce, production must be limited, according to circumstances, and in proportion to actual requirements; and beyond the limit of absorption the productive energies of the country must be diverted to other cultures or industries, more remunerative and more certain as to results.*

Of all the sugar sold in the Argentine, only part is refined; there is at present only one refinery† in the country; namely, the "Refineria Argentina" of Rosario. The greater proportion of Argentine sugar is delivered to the consumer in the form of "moist" or brown sugar, which is graded according to its colour and the care taken in its manufacture.

There are in several districts, and especially in the neighbourhood of Misiones, rudimentary factories where an impure sugar known as "rapadura" is prepared, which is sold in cubes or tablets. We have no precise data as to the production of the various grades of sugar.

During the last twelve years the manufacture of sugar

* See the important work entitled *La Culture des Plantes Industrielles dans la République Argentine*, by Carlos D. Girola, published in the *Recensement de l'agriculture et de l'élevage de la Nation*, Vol. 1. 1908, from which these data are extracted.

† The thirty-two factories hitherto referred to would presumably be crushing-mills, where cane is crushed, the juice evaporated into syrup or molasses and in some cases dried, the product being "raw" sugar.—[TRANS.]

has been greatly improved, as a consequence of the crisis through which the industry passed, which demonstrated the necessity of perfecting the methods of preparing and refining the "sap," etc. To-day a yield is obtained of $7\frac{1}{2}$, $8\frac{1}{2}$, and even 9 per cent. of sugar.

The capital sunk in the sugar industry in the Province of Tucuman amounts in round figures to £4,136,000, and is distributed as follows: Land, £1,232,000; plantations, £440,000; machinery, £1,496,000; buildings £968,000.

It will be as well to give some retrospective data here, which will show how far the production of sugar has developed during the last few years. In another chapter we shall deal with the production of sugar from the industrial point of view.

Thus, in 1884 the harvest was 24,000 tons; in 1894, 75,000 tons; and in 1895 it amounted to 109,000 tons, or an increase of 352 per cent. in eleven years. In 1904 the yield was 134,000, or an increase of 360 per cent. over that of 1884. In 1905 it was 137,000 tons; in 1906, 180,000; in 1907, 113,000.

We have stated that the Argentine Republic underwent a crisis in the matter of sugar, on account of excessive production; and that like other sugar-producing nations she has had to facilitate the export of the surplus by granting a bounty to exportation.

This premium or bounty was conceded in the following manner: a law of 1894 forced the producer to pay 6 centavos per kilogram, or 576d. per lb. on manufactured sugar; but offered him a bounty of 16 centavos per kilogram—1536d. per pound—on all sugar exported under certain conditions.

This law ceased to be in force on the 31st of December 1904; but was replaced by another, of the 1st of January 1905, by which the manufacturer who did not export 25 per cent. of the sugar he produced paid 15 centavos per kilogram—or 144d. per lb.—on a quarter of his produce, or on the proportion which he did not export.

These two laws contain a radical difference. By the first, the State received 6 centavos per kilogram upon all sugar manufactured, of which it restored 4 centavos for each kilogram delivered for consumption, and then restored 16 centavos for each kilogram exported; thus keeping to a

minimum tax of 2 centavos on sugar delivered for consumption. By the second law the State received nothing on sugar leaving the factory, as the producer confined himself to giving an undertaking for the value of 15 centavos per kilogram on a quarter of his manufactures, which undertaking was returned to him if he exported a quarter of his produce; so that in case he did export his produce the State gained absolutely nothing. But according to a resolution on the part of the Government, passed in April 1905, the tax of 15 per cent. was suppressed, together with the obligation of exporting a certain percentage of the sugar made. The sugar industry thereupon entered upon a new period of absolute liberty, and at the same time was deprived of official protection. In this matter the Argentine Republic acted in accordance with the international agreement of Brussels, which suppressed the sugar bounty.

The consumption of sugar during the eight years 1897-1904 was 780,000 tons, or 97,000 tons per annum. This consumption has not actually been uniform; for instance, in 1897, about 80,000 tons were consumed; while in 1904, 1905, 1906 and 1907, the figures were respectively about 115,000, 162,000, 127,000, and 109,000 tons.

Vines.—Another important branch of agriculture in the Argentine is viticulture, which is more especially utilised in the Provinces of Mendoza and San Juan. To give some idea of the development of this branch of agriculture we may state that in 1885 80,376 acres were planted with vines, while to-day the figure is over 139,000. Of this total 74,620 acres are in Mendoza and 30,580 in San Juan. The different species of grape are selected from the best to be found in cultivation in France and other vine-growing countries.

The vineyards have been laid out under favourable conditions, yet their product leaves something to be desired. Moreover, bad wines have often been put on the markets, sour wines, and wines adulterated with water, which have discredited the native wines, and have led many to doubt whether the Argentine wine industry can ever really take root.

The factor which has chiefly contributed to this disastrous result is the lack of capital from which the industry suffers;

the result being that the processes of fermentation and maturing are not given sufficient time.

Pressed by their liabilities, the Argentine vine-growers hurry over their wine-making, so as to put their wares on the market as quickly as possible, in order to meet their engagements. The general result, apart from exceptions as honourable as few in number, is that the industry produces decoctions of a kind, but not wines.

Despite these unfortunate conditions the consumption of the wines of the country has reached a very considerable figure, which fact has greatly contributed, thanks to very heavy customs duties, to the exclusion of foreign wines. In 1899, to go back no further, the total consumption of wine in the Republic was 322,431,166 pints, of which 237,600,000 pints were of wines of the country, and 84,800,000 of foreign wines (not including those imported in bottles). In 1900 304,440,000 pints were consumed; 221,760,000 of native wines and 82,680,000 of foreign wines. In 1901, out of 327,360,000 pints, 242,880,000 were of native and 84,480,000 of foreign wines; in 1904, of a consumption of 373,120,000 pints, 307,000,000 were of native and 66,120,000 of foreign wines.

In 1907 the total consumption of wines in the entire Republic, according to the office of National Statistics and Administration of Inland Revenue, amounted to 638,843,680 pints, of which 558,096,000 were of native production and 100,747,680 were imported.

The production of native wines is limited, as we have seen, to wines for general consumption. The finer varieties are imported.

The consumption of wines of quality in 1907 reveals a considerable increase since the previous year; which is yet another proof in support of the many to be found in this book of the excellent economic and therefore gastronomic conditions of the country. The large and profitable results of the harvests enable the people to place fine wines upon their tables.

The customs, which are always a faithful barometer of the degree of well-being which a people enjoys, afford us a proof of what we have affirmed. In 1907 there passed through the customs houses, coming from abroad, 59,520 dozens

of bottles of champagne, 1988 dozens of sherry, plus 31,438 pints in the wood; 6925 dozens of port, plus 113,843 pints in the wood; 516,520 dozens of vermouth; 27,624 dozens of semi-fine wines; 1249 dozens of French clarets, and 8111 dozens of sparkling wines. The *vins ordinaire* imported represented a total of 100,748,680 pints.

As we have already seen, the area of the vineyards in existence at the end of 1907 was of 139,132,630 acres, their value being £18,400,000. As for their yield, it amounted to 1,121,523,300 lbs. of grapes, or more than 518,000 tons, with an estimated value of £3,680,000.

There are, in the Argentine Republic, 3097 establishments devoted to the exploitation of the vineyards and the making of wine, disposing of a total capital of some £4,320,000. Their products amount to 66,762,000 gallons of wine, representing a value of £4,720,000.

If we compare the production of the Argentine with that of the principal nations of the two Americas, we obtain, for the year 1907, the following table:—

Argentine Republic	...	...	556,096,000 pints
Chili	...	...	475,200,000 "
United States	...	...	281,160,000 "
Brazil	...	...	56,320,000 "
Peru	...	...	17,248,000 "
Uruguay	...	...	16,192,000 "
Bolivia	...	...	5,576,000 "
Mexico	...	...	3,168,000 "

The Argentine wine industry, in which millions have been engaged, is, as we see, on the road of progress. It has to-day accomplished a rapid and a very considerable development, which might well, in the near future, eliminate the imported product from the market, at least in the case of wines for ordinary consumption.

Like the sugar industry, the wine-growing industry has gone through its crisis. On the one hand the abuse made of credit in establishing warehouses, cellars, and costly plant, and on the other defective methods of manufacture which brought the product into discredit, produced a deep-rooted depression, from which the industry has hardly yet emerged. It cannot look to the future until it perfects its means of

preparation, working out its brands with the aid of time and patience.

This industry, says an eminent writer, gives work to more than 100,000 inhabitants, and represents, as a matter of national wealth, a value in vineyards and factories of some £19,000,000 ; it produces annually £4,840,000 worth of merchandise, contributes £6,950,000 to the general trade, and surpasses in importance, both in the capital employed and in its products, the sugar industry of the country, which in 1907 manufactured sugar only to the value of £2,772,000.*

Tobacco.—For a long time the tobacco-plant has been cultivated in the Argentine; for we find, in various zones, conditions very favourable to its production; but its culture has by no means as yet acquired the importance of which it is capable, and is very far from satisfying the needs of national consumption.

The exports are insignificant: 37,983 lb. in 1906, and 16,612 lb. in 1907, of the respective values of £539 and £226. The lack of care brought to the cultivation of the plant and to the preparation of the leaf, together with incomplete experience from the industrial point of view, have contributed to check the increase of plantations, which ought to occupy a far larger area than they do.

Tobacco is grown chiefly in the northern region composed of the Provinces of Corrientès, Salta, and Tucumán; it is also grown to a less extent in the Provinces and Territories of Misionès, Formosa, Chaco, Catamarca, La Rioja, and Jujuy. It may be grown equally well in the central region composed of the Provinces of Buenos Ayres, Entre Rios, Santa Fé, and Córdoba; and even further south. There were formerly, and are still, tobacco plantations in the Province of Buenos Ayres, which appeared to promise a fair future for tobacco-planting; but all is as yet in a rudimentary condition, and the industry makes no appreciable progress.

* See *l'Industrie viti-vinicole de la République Argentine*, by Ricardo Palencia, an essay published in the *Recensement de l'agriculture et de l'élevage de la Nation*. Vol. I. Buenos Ayres.

The areas planted with tobacco in 1895 and 1907 were as follows:—

				1895. Acres.	1907. Acres.
Province of Corrientès	...	...	...	16,287	27,910
„ „ Salta	...	...	...	2,277	8,645
„ „ Tucuman	...	...	...	6,880	7,410
Territory of Misionès	...	...	...	5,705	1,976
„ „ Formosa and Chaco (South)				1,294	1,235
Province of Córdoba	...	...	...	3,348	1,729
<i>Other Provinces—</i>					
Buenos Ayres, Santa Fé, Catamarca	...			3,631	2,470
Totals	...			<u>39,422</u>	<u>51,375</u>

The agricultural census of 1895 affirmed the existence of 3348 acres of tobacco in Córdoba, while the *Bulletin* of the Division of Statistics at the Ministry of Agriculture announced only 1729 acres; in short, everything leads to the conclusion that we have to deal either with gross blunders or with erroneous information. As it has not been practicable for us to verify these figures we must suppose that in 1895 there was not so large an area planted as the figures would lead us to believe.*

The Mulberry.—The culture of the mulberry-tree should perhaps be included in that of industrial crops, since its leaves are the food of the silkworm.

From the time of the Spanish Conquest, says Carlos Girola, the engineer, our competent guide in the matter of industrial crops, the silkworm was raised in the Province of Cuyo, and silk was woven there on the hand-loom; but, on account of the facilities of transport, imported silks brought such a competition to bear upon the hand-made native article that the silkworm industry gradually dwindled and finally became extinct.

Numerous experiments have of late years proved that the silkworm can be raised over a great part of the country; and that it has the best chances of development where the population is densest, labour most abundant, and the houses of the workers largest and most comfortable, as in the Provinces of Buenos Ayres (North) and Santa Fé, and in parts

* See *La Culture des Plantes industrielles dans la République Argentine*, by Carlos D. Girola.

of Entre Rios and Córdoba. So far, however, there is no demand for the native cocoons, and it is so difficult to place them that at present one cannot recommend the silkworm industry except as an experiment or a speculation.

The mulberry-tree grows and flourishes excellently on the greater portion of the Argentine soil, and especially in the central and northern districts, where it springs up quickly and vigorously. It is greatly to be desired that it should be more widely cultivated, and that its wider cultivation should go hand in hand with the development of the sericultural industry, which in some countries constitutes one of the principal sources of wealth.

The mulberry also furnishes an excellent wood, and its leaves may be used to feed cattle as well as silkworms. Instead of planting trees which are of no industrial use, the mulberry should be given the place of preference.

Yerba Maté.—The “yerba maté,” or maté shrub, is met with in the woods of Misiones, where it grows in irregular clumps of varying extent. It has been known since the time of the Jesuits, who were the first to plant and cultivate it, as is proved by the plantations which to this day exist in the territory of the Argentine Missions (Misiones). With the leaf of this plant infusions are made, as with tea, coffee, cocoa, etc. The matheine contained in the leaves is possessed of properties at once tonic and stimulating.

The infusion of “yerba maté” is usually made in a receptacle shaped like a pear with an orifice at the smaller end; * it is imbibed by means of a silver tube having at one end a bulb pierced with holes, which performs the office of a strainer, and is known as the *bombilla*. This method of preparation and of use is now tending to disappear; and maté is now often prepared in the same way as coffee, the result being a very refreshing drink, very valuable in the country districts for the refreshment of travellers. Statistics prove that the consumption of maté is continually increasing; and as the national production is insufficient, recourse is had

* Usually a gourd is used, of either spherical, ovoid, or pear-like shape, with one end sliced off; it is commonly polished and carved, often by Guachos or Indians. Each drinker has his own gourd and *bombilla*, the latter being necessitated by the use of the leaf in the form of a powder.—[TRANS.]

to importation from Brazil and Paraguay. The amount of these imports for 1907 was as follows :—

		Pounds.	Value.
Maté imported from Brazil ...	...	100,189,162	£1,000,364
" " " Paraguay ...	...	6,654,276	61,182
Total of imported maté ...	...	<u>106,843,438</u>	<u>£1,061,546</u>
Importation in 1906 ...	...	...	£970,154.

We have no information respecting the national production of maté, but we have every reason to suppose that it does not exceed 11,000,000 lb.; that is, between a ninth and a tenth of the quantity consumed. There is thus a vast field of development for this branch of agriculture, especially in the Territory of Misionès, which offers all the conditions favourable to the culture of the plant.*

Encouraged by these figures, and by the desire to replace the forests of ilex, destroyed by improvident exploitation, attempts have been made to develop the culture of maté; and the first results appear to augur well for the future of this undertaking.

M. Thays, Director of the Parks and Promenades of Buenos Ayres, to whom we owe the floral and arboreal embellishment of the Argentine metropolis, was the first to overcome the obstacles to the artificial culture of the maté shrubs from the seed.

The development of the plant is fairly rapid; the plucking of the leaves may be commenced at the end of six years, and sometimes earlier: the treatment necessary for its cultivation is very much that demanded by ordinary orchard trees. Its longevity is great, and so far it is not known to be subject to any disease.

The cultivation of maté may spread beyond the Territory of Misionès, into the favourable soil of Corrientès, Chaco, and Formosa; possibly into other parts of the northern and central regions; and it may give way to a more intensive culture. M. Thays has obtained specimens of maté from seed in the Botanical Garden of Buenos Ayres, where he has grown it in the open air.

* *See La Culture des Plantes industrielles dans la République Argentine*, by Carlos Girola.

Cotton.—Of the various territories of the Argentine, none lend themselves so well as Chaco, Formosa, and Misionès to the cultivation of the cotton-plant; not only by reason of their climatic conditions, but also on account of the composition of their soil.

The cotton-plant is indigenous to the islands and sea-coasts of the Tropics, and its geographical limits of cultivation, on either side of the Equator, run to 40° of latitude in the north, and in the south to about 30°, but never as far south as 35° or 40°, in spite of the probable suitability of those latitudes.

The plant hardly suffers from the greatest heats of a tropical summer, while very cold weather interrupts its organic functions. It requires a hot, moist atmosphere for its development, but the moisture must not be excessive, or the plant will grow too rapidly.

It is doubtless thanks to these natural conditions that cotton-planting attained to a certain degree of development in the Territories of Chaco, Formosa, and Misionès as soon as the tillers of the soil became aware of its profitable nature.

The cultivation of this valuable textile is not, however, new to this country. It was grown long ago, chiefly in Misionès, during the administration of the Jesuit Fathers, who made from it cloth for their own use, and also for purposes of trade. But with the expulsion of the members of the celebrated Company of Jesus, and the resulting depopulation of the countryside, decadence overcame this branch of agriculture, and finally an almost total extinction, until to the people of the country it was no more than a memory.

Finally, in 1894, cotton was sown as an experiment in the Territory of Formosa; a few grains of the "Louisiana" and "Sea-Island" types, brought from the United States.

The results were excellent, and encouraged the sowing of larger areas. There are now, in the various colonies founded in Chaco, which grow practically nothing but cotton, some 13,600 acres under cotton. It may to-day be asserted, says an official report, that Chaco is in the van of the Republic in the production of cotton; by reason of the area under cultivation, the quantity of cotton picked at each

harvest, and the importance of its trade with the Buenos Ayres market.* In the short space of two years, from March 1902 to March 1904, the exports from Barranqueras, the port of this region, amounted to 850,564 lb. of cotton and 286,831 lb. of cotton-seed. From this we may well augur, as the above-mentioned report asserts, that Chaco will become a great cotton-producing country, on condition that various refractory factors are eliminated.

That the reader may form some idea of the future in store, during the economic development of the Argentine, for the cultivation and exploitation of cotton, he need only refer to the following calculation as to its results. The land in Chaco given over to cotton yields, in good years, an average crop per acre of 1785 lb. of cotton "in the pod"—that is, fibre and seed together. Selling the cotton at the very low price of .96d. per lb.—and the present price of cotton runs to 1.16d., 1.44d., and 1.65d. per lb.—the minimum yield would be £7, 2s. per acre, even with prices as low as we have indicated. As for working expenses, they do not exceed £4, 5s. 6d. per acre, unless by some trifling sum, according to locality; so that the average profit would be about £2, 16s. per acre.

This is the cost of production of an acre planted with cotton during the first year. Later the expenses diminish by 25 per cent., so that the net profit might reach £3, 11s. 3d. per acre.

One of the great obstacles in the way of the full development of this industry is to be found in the lack of hands indispensable for the minute and delicate operations connected with gathering the crop. It has even happened, during the last few years, that in certain districts as much as 3s. 7d. per cwt. has been offered for selected cotton, and in others as much as a third of the results of the harvest. But we may be sure that when the native farmer and the foreign agriculturalist once awaken to the extraordinary profits which cotton yields, its production will assume a far larger scale.

* See the notable monograph entitled: *Investigaciones algodeneras en los territorios del Chaco, Formosa y Misiones, año 1904*, by the agronomical engineer, Fidel Macial Perez, upon whose data we have drawn for this book.

As the growers have to deal with an industrial branch of agriculture in process of establishment it has not yet been possible to draw from it all the profit that is secured in other countries: cotton-seed, for example, in the United States especially, is a considerable source of wealth, but in the Argentine the growers have scarcely begun to utilise it by the extraction of its oil. But there is a beginning: several mills have lately been established for this purpose. The agronomic expert Macial has justly remarked that we only require spinning-mills and looms for the cycle of the cotton industry in Chaco to attain its completion.

Rubber.—Another source of forestal wealth in the Argentine, and one which is for the moment unexploited,—principally because of local depopulation and a lack of means of transport—is the extraction of the rubber contained in certain tropical plants.

Lately, for example, competent observers have discovered that the true rubber-plant, the *Ficus elastica*, exists in abundance in the north-east of the Republic, and in the Provinces of Salta and Jujuy, between 23° and 26° of south latitude, and 62° and 66° of west longitude. It is this tree which has given such value to the Brazilian territory of Acre and to various other regions of Brazil.

Various plants yield rubber: one species, of a family known as “lecherones,” grows in the darkest and dampest parts of the forest; others, called “heveas” in Brazil, are much thinner in the stem; and finally there is a third kind, the “liane” or rubber vine.

The first variety, that of the “lecherones,” gives a yield of 17½ to 22 lbs. of gum per annum; there are forest lands containing as many as 50,000 plants to the square league—over 5000 to the square mile—while the poorest districts produce 2000 to the league. Considering the present high prices of rubber, we may obtain some idea of the great wealth of this region. The method of exploitation is easy and simple; the country is indubitably healthy, and with labourers paid at the rate of 3s. 7d. to 15s. 9d. a day a considerable profit would remain.

To-day men of initiative are busily seeking to exploit

this new source of forestal wealth, which ought in time to become another centre of attraction to men and to capital.

Arboriculture.—There is another kind of culture which is destined in the future, although at present it has only the smallest importance, to become an industry of considerable moment; the culture, namely, of orchard trees, of which we must mention the rapid progress. Given the immense area of Argentine territory, endowed with the most varied climates, from the snows of Tierra del Fuego to the semi-tropical heat of Corrientès and Jujuy; from the temperate warmth of the coast to the more relaxing temperatures of the mountains of Córdoba or the Andean frontier, and containing land at all altitudes above the level of the sea, it is not to be wondered at that all the fruit-bearing trees of the world can live and flourish in the Republic.

In the northern region, and especially in Corrientès, Tucuman, Salta, La Rioja, Catamarca, Jujuy, Formosa, Chaco, and Misionès, there are to-day groves of oranges, mandarins, lemons and limes of various kinds, figs, and pomegranates. At Tucuman and Salta “chirimoyos” and “paltas” are cultivated. Almonds, olives, Barbary figs, ananas or bread-fruit, bananas and “guayabos” may also be grown in this region; but unhappily the fruit-growing industry is at a standstill, on account of the lack of labour which is so great a difficulty in all departments of the industrial and economic life of the Argentine.

In the central region we also find the mandarin or tangerine (in the north of Entre Rios and Santa Fé), lemons (in Entre Rios, Santa Fé, and Buenos Ayres), the grape-vine, especially in Mendoza and San Juan, and also in La Rioja, Salta, Catamarca, Córdoba, Santa Fé, Entre Rios, and Buenos Ayres. Peaches, prunes, apricots, cherries, apples, pears, quinces, medlars, and figs are grown in all these districts, and chiefly in the Province of Buenos Ayres, and the islands of the delta of the Parana. In the same region we also find almonds, walnuts, hazel-nuts, and chestnuts, but grown on a small scale only. There is a fair production of lemons; and the olive grows well under favourable conditions.

In the southern region there is no fruit grown, except on a few estates in the Rio Negro and in the valley of Chubut. Yet peaches, apricots, prunes, cherries, apples, and pears will flourish in certain localities; while walnuts, filberts and chestnuts might be grown on an enormous scale on the Andean slopes, where the rains are more frequent and the atmosphere more humid.

Up to the present time, on account of the large profits made by those engaged in agriculture and stock-raising, and above all on account of the insufficiency of the population, which is the prime cause of which we have already spoken, the industry of fruit-farming has been practically ignored, and what little has been undertaken has followed no definite plan, such as the careful selection of stocks and slips and saplings, the preparation of the soil, and the efficient protection of the trees. But in spite of all, very satisfactory results have been obtained, which have revealed the fertility of the soil and the excellence of the climate.

But quite lately we have seen a remarkable development in this branch of agriculture, which seems to promise a fruit-growing industry comparable to that of other and more advanced countries than the Argentine. To-day, according to Girola,* more care is expended upon the planting and cultivation of the trees, as the growers have acquired the conviction that it is better to produce quality rather than quantity, and that fruit-growing demands, like other departments of agriculture, the careful selection of varieties at the time of planting; as well as incessant improvement by means of careful grafting, and the application of special procedures to the elimination of noxious insects, and the prevention of parasitic or other maladies.

This being the case, it follows that the fruit-farmer is gradually acquiring rational methods, which will soon attest to their beneficent influence by transforming the old orchard-plantations, which were with reason described as forests of

* See the chapter *Arbres Fruitiers* in the *Investigation agricole*, by C. P. Girola, reproduced in the *Annales de la Société Rurale Argentine* for January-February 1905.

fruit-trees, into gardens of carefully cultivated plants, yielding crops very greatly improved in the matter of quality and the beauty of the fruit. On the other hand, the sellers of fruit-trees have at the same time been learning more as to the qualities of different varieties, and how best to select them, in order to place on the market those which will secure the largest profits to the grower, and to propagate the most popular species.

The cultivation of fruit-trees is far from occupying its proper rank among Argentine industries. It is distributed in an irregular fashion; some kinds of fruit-trees abound in certain districts and are rare or unknown in others; and it is impossible for growers in the latter districts to obtain them at profitable rates, on account of the difficulty and scanty means of transport.

As for the fruit trade, it has hitherto been very limited, and confined almost exclusively to the sale of fresh fruit, as with the exception of the factory of the "Tiger Packing Company" and a few others, which prepare canned peaches, etc., in syrup, all growers of fruit for public consumption offer it for sale only in the fresh state.

Yet amid the feverish activity which characterises the present situation in the Argentine, the fruit trade receives a greater impulse each year; not only in the matter of home consumption, which has been popularised by the aid of such companies as the "Co-operative Fruticola," which endeavours to supply the consumer with articles of the first quality at reasonable prices, but also in the matter of export to large foreign cities. The export of fresh fruit should soon form an important branch of commerce in the Argentine, as it does already in the United States and in other countries.

In the matter of a fresh-fruit trade with foreign countries the Argentine is particularly favoured by circumstances; for on account of her geographical position she is able to profit by the inversion of the seasons with regard to Europe; that is, by placing summer fruits on the European markets in the middle of the northern winter. Another advantage which the Argentine will enjoy on these markets is the fact that she has to reckon with no formidable competitors; for those countries that might dispute her place, such as

South Africa, which is situated in much the same latitude, or Chili, which grows a variety of good fruit, have not the abundant fertility of the Republic; or if they run her close in this respect, as is the case with Chili, they are separated from Europe by a greater distance, which considerably increases the price of transport.*

Profiting by the admirable physical advantages of the country, once this trade has obtained the indispensable assistance of rapid and convenient steamers, with special holds or refrigerating chambers for the storage of large quantities of fresh fruit, we are certain that it will not have long to wait for profitable results.

Several years ago one of the authors of this book sent to Messrs Garcia, Jacobs & Company, of London, as a commercial sample, a batch of peaches preserved by chilling, and according to the testimony of these merchants the peaches of Buenos Ayres may well be the subject of a successful business, provided that fruit of the superior varieties be produced. Entering into detail, Messrs Garcia & Jacobs added that the best qualities sent had sold satisfactorily; they ended by stating that consignments reaching London in the months of March, April, and May should yield considerable profits.

After this experiment many others were made by various persons, until finally, thinking the moment had come for establishing the fruit trade on a solid and lasting basis, the Royal Mail Steam Navigation Company determined to fit their steamers with special "chilled" chambers or holds for the transport of fresh fruit.

The first consignments have not been completely satisfactory, as in this trade, which is now being undertaken on a very large scale, every one has a great deal to learn; from the producer, who plants the varieties of fruits which he thinks most suitable for export, the farm labourer, who gathers the fruit, and the man who packs it in special cases, down to the steamship company, which has to confide the care of the refrigerating plant and the holds to a competent technician, whose duty it is to maintain a constant

* And also of refrigeration; the fruit being "chilled," that is, kept slightly above freezing point.—[TRANS.]

temperature, appropriate to each species of fruit. But even under these still imperfect conditions the progress achieved has been very remarkable, and justifies our assertion that a large export trade in fresh fruit is perfectly practicable.

The exhibitions of fruit which the Government of the Republic organises annually, with much practical good sense, have greatly helped to attract attention to the fruit-growing industry, and at the same time to stimulate competition and improvement. These exhibitions have been a veritable revelation to everybody, for very few people suspected that the Argentine produced so great a variety of the best species of fruit-bearing trees; or that she could rival other countries in the matter of production.

The fresh-fruit trade is not, in the Argentine, as it is in the United States, favoured by the existence of refrigerator cars, placed at the disposal of the producers by the railway companies, and capable of transporting enormous quantities of fruit from one end of the country to the other. But this innovation, like so many others demanded by industry and commerce, will come in time, when the population has increased, and new markets will be permanently opened to the producer. At the present time such fruits as are intended for home consumption, like those selected for exportation, have not far to travel before reaching their destination, as they are usually grown near Buenos Ayres; particularly the peach, which is the fruit most in demand on account of its superior quality.

Although the entire Argentine territory lends itself admirably to the production of fruit, there are particular districts which by nature are especially fitted for the plantation of fruit-trees. Among such districts we may cite the islands which form the delta of the Parana, which are covered with an extremely rich soil and magnificent growths, and are irrigated during certain seasons of the year by the waters of the river, which deposit on them a richly nutritious silt, like that which the famous waters of the Nile leave upon its Egyptian banks. There flourish a great variety of fruit-trees, from peach and apricot, pear and apple, fig and quince, down to the "diospiro kaki," and many other species.

Another region which has commenced to attract attention

by reason of its magnificent fruits is that of the Rio Colorado; it will one day be as famous for its peaches and apricots as California is to-day. At a short distance from Buenos Ayres is another favoured district, producing in especial magnificent peaches; it is that of the village of Dolores, in the Province of Buenos Ayres, whose exquisite fruits figure on the best tables of London and other European capitals.

As we see from these data, fruit-farming is making rapid progress in the Argentine: it may succeed in time in capturing not only the home markets, but also the most important foreign markets.

As for the preparation of fresh fruit in syrup, as well as the manufacture of dried fruits, both of them industries well developed in the United States, they still exist in the Argentine only in a rudimentary condition; but in view of the rapid progress achieved each year in the Argentine, in this as in other industries, we may hope that they will soon develop and establish themselves securely.

PART III

THE ARGENTINE FROM THE COMMERCIAL
AND INDUSTRIAL POINT OF VIEW

CHAPTER I

FOREIGN TRADE

The important part played by the foreign trade of the Argentine—Table of imports and exports during recent years—Explanation of their respective movements—Favourable condition of the commercial balance.

Method of ascertaining the statistics of exports and imports — Errors in evaluation—Notes on the import duties on various articles—Variations of the customs duties — Export duties; their transitory character — The trade in bullion.

IMPORTS—Their classification according to their countries of origin—Value of imports from each country, with indications of the principal articles imported—The Argentine dependent upon other countries for a large number of manufactured articles—Concentration of imports at Buenos Ayres.

EXPORTS—Their classification according to origin—Value of exports from each district, with indications of the chief articles exported—Decadence of the French trade with the Argentine and its causes.

Tabulation, according to importance of the principal products exported by the Argentine — Remarkable increase in agricultural and pastoral exports—Search for new outlets.

Eventual denunciation of commercial treaties — Projected new treaty with France — Causes of the superiority of English, German, and North American trade in the Argentine over French trade.

“Dumping” in the Argentine—A new client for the Argentine—Japan—Elements which make for the development of commercial activity in the Argentine.

The commercial balance—Results of the commercial balance—Its prime importance in respect of the prosperity of the country—It is this balance which compensates the issue of capital for the benefit of the foreign debt.

THE whole activity of the Argentine Republic is reflected in the statistics of its external commerce, which gives the true measure of its prosperity. All the vital forces of the country, its river traffic-ways, its railways, its ports, its business centres, all aid in the development of the commercial movement, which lives only by means of international exchange. We have thus reached one of the most important

points of our study: that from which we can best judge the place held by the Argentine among the great markets of the world.

Considered under its general aspect Argentine commerce may be summed up as follows: the exportation of raw materials and the importation of manufactured articles. We mention exportation first by design; for it is the exports, as we have already pointed out, that regulate the purchasing power of the country. There are no reserves in the Argentine which permit the country to preserve its power of purchase much in excess of the movement of capital produced by the sale of the harvest.

This situation cannot be clearly expressed in figures; for we can prove that as late as 1891 the sum of imports was greatly in excess of that of exports. In normal periods one must, in fact, take into account a new factor; namely, external credit, which allows the Argentine to increase her power of purchase above her actual resources. When, on the contrary, a crisis arises, the imports rapidly follow the movement of the exports, the country no longer being able to depend upon credit nor to cover by loans its unfavourable commercial balance.

We give below, taken from the publications of M. Latzina the statistics of foreign trade since 1861, which is the first year included in the official statistics.

The foreign trade of the Argentine has passed through two distinct phases; from 1861 to 1890 the imports were usually larger than the exports; while since 1891 the exports, except in 1893, have been considerably the larger.

It is curious to note that this reversal took place after the year 1890; that is, after the financial crisis which so violently shook the country, and deprived it of that external credit which had hitherto balanced the insufficiency of exportations. In 1891 the imports fell to £13,441,400, from £28,448,000, or a fall of more than 50 per cent. from one year to the next. Thenceforward the imports progressively increased to £37,400,000 in 1904, varying by a few millions each year, while the exports reached their present high state of development through the progress achieved by agriculture.

FOREIGN TRADE

213

YEAR.	Population.	Imports.	Exports.	Commercial Balance.
1861	... 1,375,481	£4,488,224	£2,864,518	- £1,623,706
1862	... 1,424,740	4,627,742	3,830,268	- 797,474
1863	... 1,477,042	5,473,939	4,317,689	- 1,156,250
1864	... 1,530,954	4,628,648	4,473,462	- 155,186
1865	... 1,387,101	6,056,861	5,225,288	- 831,573
1866	... 1,645,436	7,480,097	5,348,154	- 2,131,943
1867	... 1,706,159	7,758,439	6,639,223	- 1,119,216
1868	... 1,769,379	8,480,508	5,941,942	- 2,538,566
1869	... 1,836,490	8,239,140	6,489,637	- 1,749,303
1870	... 1,882,615	9,824,922	6,044,617	- 3,780,305
1871	... 1,936,569	9,135,821	5,399,360	- 3,736,461
1872	... 1,989,880	12,317,156	9,453,593	- 2,863,563
1873	... 2,045,028	14,686,807	9,479,658	- 5,207,149
1874	... 2,102,284	11,565,309	8,908,307	- 2,657,002
1875	... 2,161,639	11,524,896	10,401,822	- 1,123,073
1876	... 2,223,189	7,214,004	9,618,142	+ 2,404,138
1877	... 2,287,005	8,088,684	8,953,988	+ 865,304
1878	... 2,353,194	8,751,825	7,504,754	- 1,247,071
1879	... 2,421,827	9,272,718	9,871,511	+ 598,793
1880	... 2,492,866	9,107,176	11,676,157	+ 2,564,981
1881	... 2,565,040	11,141,185	11,587,654	+ 446,469
1882	... 2,639,573	12,249,209	12,077,788	- 171,421
1883	... 2,716,836	16,047,165	12,641,595	- 4,045,570
1884	... 2,797,042	18,811,229	13,605,967	- 5,205,261
1885	... 2,880,111	18,444,394	16,775,820	- 1,668,574
1886	... 2,966,260	19,081,749	13,966,968	- 5,114,781
1887	... 3,056,835	23,470,425	16,884,164	- 6,586,061
1888	... 3,158,914	25,682,422	20,022,380	- 5,660,041
1889	... 3,265,577	32,913,976	18,029,071	- 14,884,960
1890	... 3,377,780	28,448,162	20,163,798	- 8,284,364
1891	... 3,490,417	13,441,556	20,643,800	+ 7,202,244
1892	... 3,607,103	18,296,232	22,674,067	+ 4,377,836
1893	... 3,729,105	19,244,725	18,818,032	- 426,694
1894	... 3,856,728	18,557,725	20,337,597	+ 1,779,872
1895	... 3,984,911	19,019,287	24,013,560	+ 4,994,270
1896	... 4,084,183	22,432,718	23,376,403	+ 927,685
1897	... 4,186,267	19,657,789	20,233,859	+ 576,070
1898	... 4,291,575	21,485,780	26,765,891	+ 5,280,111
1899	... 4,400,226	23,370,134	36,983,506	+ 13,611,152
1900	... 4,512,342	22,697,014	30,920,082	+ 8,223,068
1901	... 4,625,150	22,791,949	33,543,220	+ 10,751,271
1902	... 4,741,780	20,607,851	35,897,345	+ 15,289,494
1903	... 4,860,324	26,241,320	44,196,905	+ 17,955,585
1904	... 4,981,832	37,461,194	52,831,505	+ 15,370,311
1905	... 5,214,974	41,030,884	64,568,768	+ 23,537,884
1906	... 5,377,639	53,994,104	58,450,766	+ 4,456,662
1907	... 5,546,106	57,172,136	59,240,874	+ 2,068,738
1908	... 5,712,489	54,594,547	73,201,068	+ 18,706,521
TOTALS	...	<u>£887,142,003</u>	<u>£964,278,951</u>	<u>+ £77,136,940</u>

For the explanation of these data, we must remember that during the last twelve years the population has increased only by about one million inhabitants, and that in consequence the power of consumption of the Argentine could only become modified to a certain extent. If we except certain periods of exceptional importations, referring, for instance, to the entry in bulk of large amounts of raw material for the construction of new railways, we see that the imports, as compared to the bulk of the population, represent from £5, 5s. to £7, 18s. 7d. per head, while the same figure for exports is £7, 10s. 7d. to £10, 12s. 0d., according to the condition of agriculture.

If we now examine the recent results of foreign trade, we find the situation summed up by the following figures for 1908, as compared with 1907, 1906, and 1905:—

	1908	1907	1906	1905
Exports	£73,201,068	£59,240,874	£58,450,766	£64,568,768
Imports	54,594,547	57,172,136	53,994,104	41,030,884
Excess of Exports	<u>£18,606,521</u>	<u>£2,068,738</u>	<u>£4,456,662</u>	<u>£23,537,884</u>

The commercial balance in 1908 was thus £18,606,521 in favour of the exports, as against £2,068,738 in 1907, £4,456,662 in 1906, which latter sum was £19,081,222 less than in 1905.

There is every reason to believe that the exports for 1909 will prove to have been fully as large as the year before, for the recovery of the wool market and the enormous maize harvest will have compensated certain deficits in the matter of corn and cattle, which suffered in the preceding year from frost or drought.

As for the harvest of the current year, it is wiser not to say too much at present, as the lack of rain has deranged the sowing season.

Before commenting in any way upon the figures relating to foreign trade, we must make one remark in respect of the method followed in making out our balance-sheets, etc. In the case of imports, the valuation of the customs is taken, and in the case of exports their current market price in gold. But this procedure has the demerit of yielding results which are not in strict correspondence with reality; the most we can say is that they enable us to make a strict comparison of one year with another.

The valuations according to the customs are from 20 to 30 per cent. above the true values in the case of the majority of articles, and are sometimes merely fantastic.

To gain some idea of the disturbing factor which arises from the calculation of imports upon the basis of customs estimates, which estimates are the basis of the figures of the National Statistics, we need only take the figures relating to coffee as an example. In 1899 it was valued at 30 centavos in gold; in 1900, at 20; and in 1902, at 12 centavos (7·2d., 4·8d., and 2d.). This decrease of over 5d. in three years only enables one to judge of the instability of this rate of valuation.

Here are some examples of the tariff paid by certain imports into the Argentine.

The 50 per cent. tariff strikes principally at the importation of woven stuffs, carriages, harness, furniture, perfumery, ready-made under-clothing, boots and shoes, hats, and similar articles not burdened by specific tariffs, for there is a host of articles which pays the entrance duty in this way. In practice this *ad valorem* tariff of 50 per cent. frequently becomes a tariff of 100 per cent. or more, on account of the arbitrary nature of the customs valuations.

The 45 per cent. tariff affects stockings, socks, etc., exclusively.

The 40 per cent. tariff affects bales of unbleached linen, all kinds of cotton cloth and calicoes, dressed leather, articles of lace made of pure silk or silk mixtures, or of thread; woollen blankets, and blankets of wool with cotton warp, or bound or bordered; also laces and silk thread or thread of mixed silk and woven stuffs and any other articles of silk or silk mixtures, including floss silk, etc.

The 35 per cent. tariff applies to woollen stuffs in general, whether of pure wool or mixtures.

The 25 per cent. tariff affects all merchandise not burdened by a special tax. That of 20 per cent. affects bar, strip and ribbon steel, and unbleached cotton cloths.

The 15 per cent. tariff affects oak, cedar, pine, spruce, and tissues of silk intended for bolting flour. The 10 per cent. tariff affects certain chemical products, and also cocoa, tin, machinery in general, agave fibres, jute, and hemp fibre for making mats, etc. That of 5 per cent. which is the lowest,

is imposed on turpentine, steel wire for fencing, ploughs, jewellery, sulphur, cotton, whether raw or in the thread for industrial purposes, sewing-thread, sacks, and other various articles.

Besides the above there are some ninety-five articles or products on which specific duties are imposed.

Since 1900 a legislative factor, at first sight unimportant, but in practice of the greatest advantage, has to a certain extent modified the vexatious character of the Argentine tariff. This factor consists in the relative stability imposed by Congress on the customs law, by the suppression of the annual revision to which the rate of valuation was subjected, which change has allowed commerce to establish its transactions on a definite basis; whereas they were formerly contingent upon the continual modifications of the said tariff. This step, like so many others, was initiated by the ex-Minister, Señor José María Rosa.

Exaggerated values were always at the base of these tariffs, and the abuse became so notorious that the present Minister of Finance, Dr Terry, was himself obliged to recognise "that reform was essential in the matter of the rectification of all these valuations, in order that the Customs Administration should not strike indirectly at imported products by taxes far in advance of those intended by the legislative power." A new tariff has been in force since the 1st of January 1905, and although it also has given rise to a certain degree of recrimination, it is none the less an improvement upon the former state of affairs. As for the export duties, here again we find notable discrepancies between the valuations and the market prices which ought, on principle, to serve as their basis. They were established after the crisis of 1890, and as they were now no longer justified by insufficient resources, they were suppressed by Congress reckoning from 1906.

These customs duties on exported goods were established by the Argentine Constitution, but not in a permanent manner. The Charter enacted that they should be in force up to 1866; but at that time, the country being at war with Paraguay, a Convention was convoked, which postponed the settlement of the matter for some years.

In 1887 the export duties were suppressed; but in 1900, after the terrible financial crash, they were once more established, in order to relieve the heavy burdens and engagements of the Treasury.

These duties were from 4 to 100 per cent. *ad valorem*, and were principally directed against leathers and hides, wool washed or unwashed, ostrich plumes, tallow, fat, animal oil, horns, etc.

As may be seen by this simple enumeration, these duties weighed upon the by-products of stock-raising as they left the country for the markets of foreign consumers, and this after they had already been subjected to other heavy charges, in the shape of land taxes, customs duties on wire for fencing, and many local taxes, while agricultural products escaped scot-free. For this reason it has always been considered that the export tariff had no equitable basis, and all the Argentine Administrations have for this reason endeavoured to suppress it, as the Congress finally did in 1905. Whether we are dealing with exports or with imports we always find, as we have seen, an inflation of prices on both sides, so that the figures of the official statistics have not so much an actual as a comparative value.

There is still one important item to be remarked in respect of imports: it is that the import duties in recent years have been first raised then lowered. Additional duties amounting to 10 per cent. were established when the dispute with Chili seemed about to end in war—that is, on the 29th of January 1902—at which time a supertax of 5 per cent. was added to the tariff which had already been in force since 1899. Since then these duties have been finally suppressed (in January 1904). It is obvious that with these variations we have not always the same basis of valuation, as the imports are variously affected by these variations themselves, so that all exact comparisons are impossible.

We must also take into account the value of the imports which are not controlled by the customs. Competent persons have estimated that these amount to about 20 per cent. of the goods passing through the customs, which represents a sum of about £2,000,000.

Again, the figures we have quoted do not include the

movements of currency or bullion, which during the last six years have been as follows :—

Year.		Metallic Imports.	Metallic Exports.	Balance.
1902	... ..	£1,781,817	£614,868	+ £1,166,949
1903	... ..	5,217,237	239,230	+ 4,978,007
1904	... ..	4,983,590	320,858	+ 4,662,732
1905	... ..	6,511,908	163,875	+ 6,348,033
1906	... ..	3,642,464	301,124	+ 3,341,340
1907	... ..	4,710,545	626,777	+ 4,083,768
1908	... ..	5,730,243	8,963	+ 5,721,280
1909 (six months)		7,888,781	2,991	+ 7,885,789

The increase observed from one year to the other in the importation of bullion is in direct relation to the increase of exportations: it corresponds to the consignments of gold, coming especially from the London market, in order to expunge the commercial balance in favour of the Argentine.

In the light of these observations we will now examine the commercial movement in itself, while noting its distribution according to the various countries which exchange their products with the Argentine.

We will then give a list of the principal articles entering into the composition of this foreign trade.

IMPORTS

Here is a table of imports for the years 1906-1908, and for the first six months of 1909, classed according to their origin and in order of importance:

Country of Origin.	1906.	1907.	1908.	1909. (Six months).
Great Britain ...	£18,965,987	£19,587,148	£18,674,279	£9,416,405
Germany ...	7,683,252	9,162,234	7,569,417	4,305,742
United States ...	7,894,979	7,768,455	7,119,401	3,704,917
France ...	5,348,975	5,093,605	5,295,385	2,998,346
Italy ...	4,824,727	4,800,648	4,982,649	2,706,014
Belgium ...	2,425,608	3,179,370	2,550,674	1,309,920
Brazil ...	1,328,205	1,569,871	1,457,189	751,923
Spain ...	1,473,654	1,458,894	1,723,622	859,013
Uruguay ...	366,648	494,551	441,407	269,740
Holland ...	302,349	352,401	407,606	212,714
Paraguay ...	261,794	282,867	301,991	185,114
Cuba ...	135,916	115,396	136,137	59,607
Chili ...	105,643	110,965	145,398	39,756
Bolivia ...	26,822	25,375	31,212	13,443
Other Countries	2,829,544	3,170,354	3,758,181	1,414,952
Totals ...	<u>£53,994,104</u>	<u>£57,172,136</u>	<u>£54,594,547</u>	<u>£28,276,906</u>

Great Britain is always at the head of the list of imports, the total of her products imported by the Argentine in 1908 being £18,674,279. Among these products one of the greatest importance is coal, of which 2,338,949 tons were imported in 1907, representing a value of £3,274,528. Woven fabrics of all kinds attained a value of £3,038,694; railroad material £2,703,945, and sacking for making up into sacks, £296,585.

Germany now occupies the second place. The imports from Germany, worth £7,569,417 in 1908, are of all kinds, and include almost every kind of product consumed by the Argentine. On account of her various industries, metallurgical products holds the first place; then come woven fabrics and paper.

The United States send principally agricultural material, petroleum, and pine timber; the imports for 1908 were £7,119,400 in value; or nearly twice the value of the Argentine exports to the States. This situation is explained by the fact that both countries export the same products—cereals and cattle, etc.

France comes fourth, with £5,295,385 worth of produce in 1908. Her products, like those of Germany, are very numerous in kind. The largest imports are of woven fabrics, wines and spirits, metallurgical products, pharmaceutical specialities, and perfumery. Taking the item of wines and spirits alone, the Argentine imports £228,000 worth of bitters and vermouth and £202,560 worth of wines in the wood.

Italy sent £4,982,649 worth of imports in 1908. From Italy the Argentine imports the largest quantity of wines and of bitters, valued at £922,938; olive oil accounts for £394,133, rice for £295,667, cheese for £181,949 (the weight of this import in 1907 being 2,274 tons); in short, all the articles most in demand among the Italian emigrants. Woven fabrics attained a value of £927,857.

Far below the countries already named, with an amount of produce less than half that imported by France, comes *Belgium* (£2,550,674 in 1908); then *Brazil* (£1,457,189), and *Spain* (£1,723,622). Belgium sends principally metallurgical products; Spain her wines and oils and salt. Brazil sends only

a dozen or so of products; the most important being coffee, tobacco, and especially the yerba maté; a herb analogous to tea, and used as a beverage in the country districts. Brazil and Paraguay, which supply it to the Argentine, sent £1,046,183 worth of the herb in 1908.

The table given below shows what are the principal products imported by the Argentine Republic, and show the considerable increase which has taken place in all branches of importation:—

	1906.	1907.	1908.	1909. (1st six months)
Alimentary products ...	£3,532,509	£4,183,187	£4,709,819	£2,226,053
Beverages ...	2,358,808	2,526,748	2,655,956	1,155,965
Textile materials and fabrics	10,826,008	9,466,638	9,982,267	5,787,076
Mineral oils, and chemical and pharmaceutical pro- ducts ...	3,092,766	3,254,653	4,048,175	2,174,871
Woods, furniture, etc. ...	1,122,444	1,272,008	1,262,573	728,178
Iron, machines, materials, implements, utensils, etc. }	6,988,461	6,632,228	6,015,097	3,401,912
Coal and other mineral pro- duce ...	4,182,160	4,126,910	4,979,839	2,229,224
Various products* ...	21,890,946	25,709,763	20,960,820	10,544,272
Totals ...	<u>53,994,102</u>	<u>57,172,135</u>	<u>54,594,546</u>	<u>28,507,351</u>

We see from this table that the Argentine relies on foreign imports for the greater number of metallic, chemical, and textile products, and even for a great many food-stuffs. An essentially agricultural nation, she has not as yet developed her industrial equipment, nor has she been able to undertake the transformation of the raw materials at her disposal into manufactured products. The development of her agriculture is the object which has hitherto absorbed all the initiative and all the capital of the country.

It is this dependence upon foreign countries for so many articles of prime necessity that makes the cost of living in the Argentine so high. All these articles have to pay customs dues varying from 5 to 50 per cent. *ad*

* Under this heading of various products are included railway material—rails, chairs, locomotives, etc.—to the value of £4,672,486 in 1905, £7,011,072 in 1906, £10,464,150 in 1907, £6,015,097 in 1908, and £3,401,912 during the first six months of 1909. Building materials amounted in value to £4,400,339 in 1906, £4,604,078 in 1907, £4,236,485 in 1908, and £2,492,276 in the first half of 1909.

valorem; dues which still further increase the exaggerated valuations of the Customs Administration.

On the other hand, these imports are by no means so decentralised as the exports; they are brought as near as possible to the centres of consumption, so that they shall not be forced to pay fresh freight dues in the interior. The Customs House of Buenos Ayres handles 84·9 per cent. of the imports; Rosario 9·2 per cent.; La Plata 1·9 per cent., and Bahia Blanca ·8 per cent. As we see by these figures, the Federal Capital almost monopolises the imports, whence arises its disproportionate development as compared with the rest of the country.

EXPORTS

Here is the table of the exports of the last three years, arranged according to their destination, in order of importance:—

DESTINATION.	1906	1907	1908	1909 (1st six months)
Great Britain * ...	£8,644,807	10,743,230	15,644,944	10,207,653
France	7,152,671	7,552,409	5,782,750	4,761,514
Germany	7,883,439	7,284,611	6,950,399	4,280,523
Belgium	5,124,279	5,918,426	7,155,637	5,531,015
Brazil	2,378,263	2,803,686	3,019,115	1,729,824
United States ...	2,666,422	2,188,087	2,604,647	2,411,460
Italy	1,381,225	1,043,893	1,581,571	1,508,815
Holland	595,047	834,818	1,059,934	623,634
Spain	514,515	387,121	519,920	248,823
Chili	277,107	370,133	307,501	297,018
South Africa ...	791,606	303,118	172,088	24,662
Uruguay	1,006,880	275,328	154,891	112,329
Cuba	49,478	144,896	57,891	42,046
Bolivia	65,719	121,610	118,745	75,616
Paraguay	41,003	36,530	42,733	17,166
Other destinations ...	755,324	598,740	921,081	792,241
Shipments to order	19,122,949	19,252,891	27,085,119	17,710,457
	<u>58,450,766</u>	<u>59,240,874</u>	<u>73,201,068</u>	<u>50,354,688</u>

In the matter of exports the first place is again held by England, with an exportation of £15,664,944 in 1908 as against £10,743,230 in 1907, an increase of £4,421,714.

* It should perhaps be explained that the totals are correctly converted from the Argentine values, but are not the exact sums of the columns of figures, as these latter are for economy of space printed without the following decimals that result from conversion. The error in any one case is infinitesimal—from $\frac{1}{100}$ th to $\frac{1}{1000}$ th of 1 per cent.—[TRANS.]

England is the Argentine's largest client in the matter of agricultural produce, taking 16 per cent. of the whole amount exported. In 1907 she spent £3,739,509 on chilled meats; £1,843,954 on cereals—wheat, maize, and linseed; £1,212,471 on wools; £193,834 on butter, and £379,810 on sheepskins and cowhides, dried and salted. Australia also imports wheat and maize from the Argentine.*

The export trade to England is still capable of a far greater expansion, if England will only determine to allow cattle on the hoof to be imported once more; an import she denied herself some years ago, on account of anthrax, and one which the Argentine is eagerly begging her to resume, under proper sanitary regulations.

It is England which has hitherto preserved the closest balance between her exports to and imports from the Argentine, and no other country has so far been able to oust her from her dominant position in the Argentine foreign trade. From this we see that the ties which unite the two countries have nothing factitious about them; a fact which is still further emphasised by the statistics of English capital employed in the Argentine.

Germany holds the second place, with her £6,950,399 of imports from the Argentine (in 1908: £7,284,611 in 1907). After England, she is the greatest consumer of Argentine wool; the exports of this product in 1907 amounted in value to £2,846,213. Other articles absorbed by Germany are hides (to the value of £1,045,417), and cereal products—wheat, maize, linseed, and bran—(to the value of £1,013,426). The German imports from the Argentine do not, however, include cattle or chilled meats.

France, up to 1876, occupied the first place on the scale of Argentine exports. To-day her imports from the Argentine amount to £5,782,750 only (1908), or nearly £10,000,000 less than the English imports (in 1907 they amounted to £7,552,409). Her purchases in the Argentine are confined to a very few products, of which the chiefest is wool, the value of the export in 1907 being £4,908,510, or a little less than half the entire Argentine production. Then come hides, to the value of £1,508,764; then linseed, maize, and wheat to

* These figures are for 1907 except where otherwise stated.—[TRANS.]

the value of £309,956, £322,473, and £271,488 respectively, the whole imports from the Argentine in 1907 being £7,552,419.

The French system of Protection has so far stood in the way of the trade in Argentine cereals, and has absolutely prohibited the entry of animals or chilled meat. The interests of the French agriculturalists and cattle-breeders have hitherto come before the interest of the consumer, which is to obtain the products necessary to life in the cheapest market. But overtures are being made, by the common agreement of both countries, which may eventually open the French market to Argentine meats, in return for certain concessions granted to France, relative to the exportation of her own products—her wine, silks, woven fabrics, etc.

The marked and progressive decadence of the Franco-Argentine trade ought to rivet the attention of French capitalists and statesmen. Hitherto numerous ties have connected France and the Argentine. The fundamental code and the legislative system of the South American Republic have been impregnated by the spirit of liberty, equality and fraternity proclaimed by the French Revolution. The Argentine mind is fed upon French thought, science, and literature. It is now, however, to be seen that the intellectual influence of France is losing ground, as well as her commercial influence, as to-day the sense of national fraternity is based upon solidarity of interest.

Now the decadence of French trade with the Argentine is truly alarming. If we consult the publications of the National Department of Statistics, we find, for instance, that in the thirty-one years from 1876 to 1907 the German exports to the Argentine have increased by 2450 per cent.; the Belgian, by 1002 per cent.; those from the United States by 1898 per cent.; Italian exports by 907 per cent.; English by 992 per cent.; but French exports have increased only by 204 per cent.

Compared with other nations, France has least been able to hold her own in the matter of trade with the Argentine. In 1876 the importations from France formed 23·2 per cent. of the total imports; while in 1908 they formed only 9·9 per cent. of the totals, making a proportional diminution of 13·3

per cent. in thirty-two years. Our imports from England, however, which in 1876 were 24·9 per cent. of the total, had increased to 34 per cent. by 1908; representing a proportional increase of 9 per cent.

We are thus justified in concluding that all our efforts to develop the current of Franco-Argentine exchange will contribute powerfully to fortify the influence of France, and the sense of confraternity between the two Latin nations.

The causes of the decay of the French trade have been recapitulated in an official document despatched in 1904 by the French Chamber of Commerce in Buenos Ayres to the Minister of Commerce.

These causes may be summarised as follows:

1. The exaggerated duties to which many of our products are subjected on entering the Argentine.
2. The competition of local industry with the imports of certain products.
3. The dearness of labour in France, and the consequent cost of manufacture, which in many cases no longer permits us to struggle against our competitors.*
4. The imperfection of our equipment for making certain articles.
5. The persistence of our manufacturers in disregarding the tastes of their *clientèle*.
6. The insufficiency of the credit granted by French manufacturers and merchants as compared with those of other competing countries.
7. The frequent lack of technical knowledge on the part of foreign commercial travellers; a lack which almost always prevents them from benefiting as they should from direct contact with their customers.
8. Finally, in the matter of navigation, the expensive character of our vessels, and the resulting dearness of freight.†

* The case of France is especially interesting, because her tendency is towards self-sufficiency—the reverse of the policy of nearly all other countries.

† See *Rapport à M. le Ministre du Commerce sur les causes de la diminution du commerce française dans la République Argentine*, 1904.

Belgium imports some £5,918,426 worth of produce from the Argentine (£7,155,637 in 1908). She receives much the same articles as Germany : £1,456,196 worth of wool, and £2,285,174 worth of cereals, of which £1,551,228 goes for wheat. We find a new item figuring in the Belgian imports—extract of beef—to the value of £173,885; this extract is made by Kemmerichs, the rivals of Liebig's, who manufacture their extract on the Uruguay.

Of late years the Argentine has gained a new client—*South Africa*. During the Boer war an extensive export trade sprang up, in live animals, chilled meats, and cereals, and this trade has been maintained. The value of the exports to South Africa in 1908 was £172,088 (£303,418 in 1907.)

Brazil also imports alimentary products from the Argentine: cereals, and especially wheat and flour. The value of the exports to Brazil in 1908 was £3,019,115. Between the two principal countries of South America—Brazil and the Argentine—economic relations are promoted by convenience; Brazil furnishing the produce of its prosperous and varied forms of agriculture—coffee, yerba maté, tobacco, etc.—in exchange for Argentine cereals and cattle.

In North America, on the contrary, the Argentine finds few outlets for its products, as the two countries have almost the same products. The exports to the United States were £2,188,087 in value in 1907; £2,604,647 in 1908; consisting almost entirely of hides, wool, and extract of quebracho for tanning; while, as we have seen, the exports of the United States to the Argentine reach the value of £7,100,000.

The Argentine Government has given much thought to the disadvantages of this commercial situation; it has sought means to remedy it, but so far has adopted no practical measures. It has also endeavoured to conclude a commercial agreement with Brazil, but without success, because in South American states questions of race-antagonism often give rise to the gravest problems. This fact also explains why the attempts to establish a commercial treaty have so far failed.

In his last message, however, the President of the Republic

admitted that negotiations were in progress with a view to opening up new markets and to increase the mutual trade of the Argentine and other countries. He even announced that a commercial treaty with Chili was almost completed. On the other hand, as arbitration treaties have just been concluded with Brazil and the United States, we may infer that these countries are not systematically opposed to any understanding with the Argentine.

Holding positions far inferior to the foregoing countries are: *Italy*, which in 1908 received £1,581,571 worth of Argentine products, principally maize and hides; *Holland* receiving £1,059,394 worth of imports, comprising linseed and cereals (maize and wheat); *Uruguay*, importing live-stock, meat, sugar, hides, etc., to the value of £154,891 in 1907 (£275,328 in 1908); *Spain*, importing maize, hides, and fats to the value of £387,121 in 1907 (£519,920 in 1908); and *Chili*, importing Argentine produce to the value of £370,133 in 1907 (£307,501 in 1908), consisting entirely of cattle and mules.

Finally we must mention *Austro-Hungary*, although that country has very little commercial contact with the Argentine. The imports from Austria and Hungary amount to some £500,000 or £600,000 (£578,932 in 1907, £658,700 in 1908), and the Argentine exports, principally wheat, amounted to a value of £150,395 in 1907, and £214,227 in 1908.

One department of the foreign trade of the Argentine cannot be precisely classified; namely, that of the products which are loaded on vessels which make seawards, and those which, coming from the river custom-houses, are transported to Buenos Ayres, there to be transhipped for foreign countries. The value of such exports was £19,252,891, in 1907, and £27,085,119 in 1908. This sum includes the value (£18,654,153 in 1907) of agricultural products, wheat and maize, despatched to order but without exact destination, whether to Saint Vincent in the Cape Verde Islands, Las Palmas in the Canaries, or Falmouth in England.

The following table shows, in the order of their importance, the products exported by the Argentine during the three

years 1906-1908 and the first six months of 1909, so that we may see at a glance what branches of production have most rapidly increased :

	1906.	1907.	1908.	1909. (1st six months)
Products of Stock-raising	£24,827,397	£24,764,041	£23,023,691	£16,213,533
„ „ Agriculture*	31,530,938	32,818,324	48,335,432	32,986,430
Forestral products	1,184,372	1,068,471	1,269,447	794,772
Various	908,168	590,037	272,497	359,952
Totals ...	<u>£58,450,875</u>	<u>£59,240,873</u>	<u>£72,921,067</u>	<u>£50,354,687</u>

We see that agricultural products were responsible for the enormous increase in the trade statistics of 1908. They represented 66 per cent. of the total exports, and had increased nearly 50 per cent. in one year. The products of stock-raising have not increased; on the contrary, there is a falling off of more than £5,000,000 between 1905 and 1908, the value in 1905 being £28,208,597.

We see from the preceding data how greatly agriculture has developed in the Argentine during the last few years. To realise precisely how great this development has been, we need only recall the fact that the exportation of corn is now 10,000 times greater than it was thirty years ago: maize has increased by 800 per cent.; fodder, by 80 per cent.; linseed, by 70,000 per cent.; flour more than 600 per cent.† These figures show how rapid the growth of the Argentine has been, and what progress has been realised in spite of temporary crises.

If we now consider the progress of external trade, not from year to year and in detail but as a whole, and over a large period, we can no longer doubt that this trade is destined to accomplish still greater development. Importation too, the field for which is somewhat restricted, may also realise a greater progress as the population increases. Again, once the Argentine develops her industries with greater energy, it is only natural that larger quantities of raw material will be imported, to be transformed into manufactured articles.

* The agricultural exports for 1906 were sensibly lower than those of 1905, on account of a decrease of £3,864,392 in the exports of wheat.

† Latzina, work already cited, p. 511.

As for the increase of exports, we have only to turn to the data already given concerning the annual increase in the area of sown land, and the importance of those lands which have yet to reach their true value, but will do so as soon as the stream of immigration supplies them with settlers and colonists.

Moreover, the creation of a network of economical light railways, and the opening of new ports on the great rivers, will give the export trade new facilities, which will naturally result in an increased trade.

In the first edition of this book we remarked that there was still an unknown factor in the future of the foreign trade of the Argentine. Now there is, in the Presidential Message, an allusion to the eventual termination of the commercial treaties with the principal nations, with the intention of suppressing the "most favoured nation" clause, and of opening up direct negotiations.

Very fortunately this measure has had no practical consequences, for the revision of treaties is a delicate piece of work for a nation essentially tributary to the foreigner, if one wishes to avoid the risk of provoking reactions which might compromise the results already obtained.

This "most favoured nation" clause, which the Republic inserts in all its treaties, has, for the rest, by no means impeded the enormous expansion of the Argentine export trade which we have already noted. We must conclude that the termination of commercial treaties, with the object of effacing this clause, has become, even in the case of distinguished statesmen, a continual obsession, although it is justified by no decisive argument, and might well expose the country to dangerous vicissitudes.*

On certain points, however, the customs laws of the Republic might well be revised in such a way as to stimulate foreign trade.

Thus with regard to France official negotiations have already been opened, with the object of affording the Argentine certain facilities in the introduction of her chilled

* One may with profit consult a notable report on *La clause de la nation la plus favorisée*, presented to the Minister of Agriculture by the Divisional Chief, Richard Pillado.

meats; while in return French wines and woven fabrics, etc., were to be given a preferential treatment. Just as the basis of this arrangement appears, we have as yet no reason to suppose that it will be ratified by the two nations concerned, or that it will soon be put into execution.

Taking a more general point of view, we are obliged to admit that if French commerce, and especially French industry, have not won the place which should be theirs in the Argentine Republic, when we consider the magnitude of Argentine exportation to France, it is because French men of business and manufacturers have started from a false principle, from whose consequences they and the Argentine are still suffering. Instead of following up the rapid evolution of the Argentine, the French have persisted in regarding it, from afar off, as a nation scarcely yet open to civilisation and progress. They used to seek to get rid of remainders, old-fashioned articles, and out-of-date equipments in the Argentine, as they do to-day in China and Africa. Such railways as are built with French material are an example of this practice; their installation left much to be desired, and it is only lately that they have made some efforts to support comparison with other lines.

The English, Germans, and Americans of the States were better advised. Having studied with greater care the country and its tendencies, they were able to initiate it into the paths of material progress. Those railways which were built by English contractors or companies are models of perfect adaptation to the needs of the country. The equipment of the tramways, furnished by the United States, may be compared with that of the principal capitals of Europe. In the matter of electric lighting the great German companies have installed the best German plant.

The same observations may be made of a large number of other products imported from abroad. There is nothing better in the United States in the matter of agricultural equipment than that possessed by the Argentine; as for stock-raising, we have only to remember that it is to South America that England sends her best bulls, rams, and stallions.

But from these remarks it must not be concluded that

the Argentine has bought too dearly the glory of an equipment which is modern as compared with that of the old European nations. Of late years it is rather the reverse that has been true. The leading industrial countries, being anxious to sell off their stock on account of an almost general over-production, have been propelled towards the markets of exportation in order to get rid of their surplus. From this has resulted a competition from which the Argentine has in many cases profited, by obtaining industrial products under particularly advantageous conditions. Such has been the case in the matter, for example, of rails; the German trade offered them at £4, 16s. per ton, at a time when the European prices were considerably higher; Germany, however, was supplanted by the factories of the United States, which supplied them at £2, 8s. per ton. This is an application of the new economic process known as *dumping*, which consists in developing production as far as possible, in order to lower the net cost of production, and then to sell at this net cost price, in foreign markets, all that the producing country fails to absorb.

All the nations we have cited are the actual consumers of Argentine products; but it is to be hoped that yet other markets will be opened, attracted by the abundance and the quality of these products.

Among these countries disposed to trade with the Argentine we must mention the Japanese Empire, which is endeavouring to develop its trade upon a reciprocal basis, and has sent a commission of delegates to Buenos Ayres, who were instructed to obtain complete and practical data as to the possibility of establishing a mutual trade with the young South American nation.

The Japanese commissioners have accomplished their trade with the earnest application characteristic of their countrymen, and after studying the question for more than a year they have arrived at the conclusion that many Argentine products, and among them wools, hides, and flour, might find an extensive outlet in Japan; but only if imported free from the expenses imposed by the European middleman.

Pursuing their investigations, the Japanese Commissioners

discovered that the great difficulty in the way of a direct trade between the Argentine and Japan consists in the fact that there is no direct line of steamers; but this obstacle might be overcome by an arrangement with the Toyo-Yusen-Kaisha Company, which would establish a direct service to Buenos Ayres *via* Cape Town in forty-five days; at present the voyage takes seventy days. This arrangement would lead to a reduction of 75 per cent. on the freights.

Flattering, however, as the prospects of this new market may seem, there is one item in the plan of the Japanese Government which gives rise to considerable reflection on the part of our Argentine statesmen: namely, the proposal to introduce Japanese agricultural immigrants into the Argentine; that is, immigrants whose presence would in many ways be inconvenient; against whose presence the United States and other countries have reacted, and whose very presence in the Argentine would be contrary to the sense of the Argentine Constitution, which imposes upon Congress the duty of encouraging *European* immigration.

In concluding this study of the foreign trade of the Argentine Republic and its remarkable development, we cannot do better than quote the enthusiastic words by which an Argentine statesman terminated a study of the same question, thus summarising all the various elements which concur in the development of the commercial activity of the nation:

“Despite the scanty population, and the small proportion of our agricultural resources which has as yet been exploited, the production of the Argentine is considerable. The herds grazing in our pastures show the state of progress which stock-raising has attained; the harvests which cover the plains of Santa Fé and Buenos Ayres have made the name of the Argentine Republic known on the markets of Europe as that of a flourishing agricultural country; sugar, the product of the cane-fields of Tucuman, has enriched that Province and the national industry, and very shortly the vines grown in the valleys of the old Province of Cuyo will achieve a yet wider development, and will give still more abundant vintages.

"The smoke-stacks of manufacturers overlook many of the cities of the Republic, and certain native products are now being transformed, as raw material, into finished articles by the nation's labour. Industries based upon the vitality of our production, and supported by the public powers solely in a rational and equitable degree, are developing themselves without being forced to resort to the exaggerated and always mistaken assistance of an excessive protectionism. In short, our foreign trade, upon whose promising results we have already commented, will in its turn fortify the economic organism, which is the basis of the welfare and the power of nations." *

The Commercial Balance.

In a country like the Argentine, which has no accumulated reserves, and has not become the creditor of foreign countries by investing its capital abroad, a favourable commercial balance (that is to say, the realisation of an excess of exports over imports) is a matter of considerable importance. Now this excess was £18,600,000 in 1908 ; a record, if we omit 1905, which proves clearly that the Argentine has entered upon a period of exceptional prosperity from the economic point of view.

To understand the full significance of this commercial balance, we must bear in mind the financial situation of the Argentine, which has a foreign debt of £74,200,000, demanding a yearly interest of £3,907,200, payable, of course, in gold. In order, then, that the country may be able to keep its engagements, the total value of its exports must cover the amount due on the year's imports and must also cover the interest to be paid on the foreign debt, the dividends earned by the railway companies, etc., and the expenses of maritime transport.

All that we have considered up to the present shows that the productive capacity of the Argentine is limited to the results of agriculture and stock-raising. With the exception of these two elements we may say that the country produces nothing, transforms nothing. Industry is as yet in its

* See *Memoria del Departamento de Hacienda*, by T. M. Rosa, 1899, vol. i., p. 170.

infancy; internal trade is undeveloped; the mercantile marine is of no importance. For this reason the Argentine must perforce employ the results of its agricultural exportation in procuring what it lacks—objects of prime necessity, or raw materials of all kinds. We can thus understand what an influence a change for the worse in the commercial balance may exercise on the destinies of the country. If there is a bad harvest the deficit must somehow be made up; and as Argentina has not as yet saved enough capital to allow her to live on her own reserve funds, it is at such times that a loan becomes necessary.

Thus each bad harvest helps to increase the foreign debt, to say nothing of the financial disturbances which it may create.

It may be asked why, after a certain number of years of abundant harvests, the Argentine has not as yet established this financial reserve, which would serve to lessen the blow of a bad agricultural year, and compensate the deficient exportation of a year of lean cattle. The answer will be found in the figures which we print further on, relating to the amount of foreign capital invested in the Argentine; in Government bonds, shares in railway companies, or other undertakings, public or private. According to our estimate, this sum amounts approximately to £317,200,000, representing an annual drain of £18,400,000 in the shape of interest, dividends, or redemption money. This is assuredly the outlet by which much of the country's savings escape, for we may truly say that the Argentine, which is in a sense so much international territory, works more for other countries than for itself.

Again, as we shall see, this exodus of capital takes place also by other means; notably by the emigration of those natives or foreigners who leave the Argentine to settle in Europe. It is not rare, among Argentine families, to see certain members, having made their fortunes, emigrate to enjoy their incomes under other skies. This applies yet more frequently to foreigners. The Italian, for example (and more Italians come to the Argentine than natives of any other country), the Italian is given to transforming his savings into money of his own country; either with a view

to returning, or because he cannot on the spot find security or facility for the accumulation of personal property.

So at the present time there are two distinct movements of capital; two movements of contrary direction and absolutely distinct. Firstly, money flows into the country in payment of exports; secondly, money flows out of the country in payment of imports; and also in consideration of foreign capital invested in the Argentine. From these two movements, in times of prosperity, a third movement arises; a movement which brings foreign capital into the Argentine, where it finds employment in important undertakings, due to Governmental or to private initiative. But although this influx of capital may mean further national progress, it does not permanently affect the commercial balance of the country, as the revenue deriving from it benefits the foreigner.

Whatever point of view we assume, we must always arrive at the same conclusion; that the whole economic life of the Republic depends upon its agricultural exports; its commercial balance has no other counter-weight to help it to overcome the burden of debts contracted abroad by the importation of merchandise or of capital. For ten years now the sense of this commercial balance has been constantly in favour of the exports, and there has even been a remarkable progress, scarcely interrupted at critical moments. But ten years is only a brief period in the life of a people; and however favourable the future outlook may appear, we must always be prepared for a possible deficit, for a minus balance, as the result of a bad harvest or some grave political crisis. These, in a country without reserves of capital, are contingencies of which we must never lose sight, and which force us to express our appreciation of the financial or economic system of the Argentine with a certain reserve.

CHAPTER II

THE GREAT ARGENTINE INDUSTRIES

The principal industries of the country are related to agriculture and cattle-breeding.

SUGAR-PLANTING, BOILING, etc.—Capital engaged—Tucuman the chief centre—Production and exportation—The sugar crisis—The Rosario Refinery.

FLOUR EXPORT TRADE—Capital invested—Equipment, steam flour-mills, grain-elevators—Production and exportation.

REFRIGERATION—At present the chief industry of the country—Number of establishments—Table of exports of frozen and chilled meats—Capital invested—Development of the industry.

DAIRY INDUSTRIES—The large establishments devoting themselves to these industries—Butter; cheese—Exports of butter; the development of which the dairy industries are capable.

BREWERIES—Chief establishments—Production and consumption of beer during the years 1902-1907—Suppression of imports of foreign beer.

SPIRITS—Decreased production of spirits.

LOOMS, TANNERIES—Weaving and tanning are industries which at present exist in the Argentine only in a rudimentary condition, despite the conditions which are favourable to their development.

QUEBRACHO WOOD—The centre of production—Applications—Companies engaged in the industry—Their results—Value of the products and the large profits to be expected.

TIMBER TRADE—Varieties of timber and hard woods.

FISHERIES—First results of this industry.

THE industry of the Argentine Republic is more or less independent upon its agriculture and stock-raising, which contribute the raw materials for the manufacture of various alimentary products. Among those industries which are thus dependent on the produce of the soil we must mention, as the more important, sugar-boiling, flour-milling, the chilled-meat industry, the making of butter, cheese, and oil, brewing, and distilling.

Besides these industries, the majority of which are flourishing and suffice for the needs of the country, we must mention others which are still in a rudimentary state, but which seem to have an assured future, on account of the abundance of raw material; namely, the weaving of woollen and cotton fabrics, and the preparation of leathers. We

shall therefore have occasion to remark upon the conditions of their development.

Sugar Factories.—The sugar industry has fairly remote antecedents in the Argentine. Dr Latzina traces it back to the Jesuits; the inventory of their goods, drawn up at the time of their expulsion in 1767, proving the existence of a field of cane and a sugar-mill.

Despite its respectable antiquity, the sugar industry only began to be of significance towards the middle of the nineteenth century, at which time it was established in Tucuman, whose soil appeared to be favourable to the cultivation of the cane. Since then it has developed gradually, but it is only during the last ten years that it has spread to any considerable extent.

We have given the details of this development, together with figures, in the chapter dealing with the industrial branches of agriculture, in which we spoke of the laws affecting this industry.

To-day the number of sugar-mills or factories is thirty-one; they belong to limited companies or to private persons, and represent a total capital of £4,224,000, to which sum we must add another of £2,640,000 as the value of some 160,200 acres planted with cane, at the rate of £16 to £17 per acre, and £369,600 as the value of the Rosario Refinery; which gives us a total of £7,233,600 invested in this industry. The largest undertakings used to be in the hands of Señor Tornquist and M. Hilairat, now both deceased, to whom the country is indebted for the great progress effected in this industry.

To sum up the position of this industry, we must recall the fact that the area of Argentine soil planted with sugarcane at the end of 1907 was 172,900 acres, which yielded an average crop of 12·4 tons of cane per acre, and produced about 130,000 tons of sugar.

The sugar industry has been developed in this country, as in so many others, by the system of export bounties or premiums, which has since been suppressed. Twenty years ago the Argentine had to import nearly all her sugar from Europe—more than 100,000 tons per annum—while to-day she produces far more than she can consume, and has to export the surplus of her production.

Although the progress accomplished was so rapid, it was not effected without certain misunderstandings, caused by excessive production. At the end of the sugar crisis of 1896-7, which occasioned the closing of a number of factories, attempts were made to regulate the industry, at the instance of the leading makers. To-day there is a syndicate which regulates production within the limits of exportation and production, and serves as a sales agency for all the factories.

The sugar industry of Tucuman has the advantage as part of its equipment the Rosario refinery, which receives the raw sugar of Tucuman and subjects it to the various processes of crystallisation and bleaching. Its output during the agricultural year 1906-7 was 107,621,800 lb. of refined sugar; during the year 1907-1908 it was 120,552,220 lb.

Flour-milling.—Flour-milling has had much the same history as the sugar industry. Although the industry was established in the Argentine as early as the sixteenth century, it has only been properly developed during the last twenty years. Before this period the Argentine was supplied partly from Chili, as its power of production had not kept pace with its population. To-day the situation has been completely transformed, since the enormous development of agriculture; not only does the flour produced suffice for the country, but since 1878 an export trade has sprung up, amounting to 39,000 tons in 1902, 72,000 in 1903, 107,000 in 1904, 144,700 in 1905, 129,000 in 1906, and 127,000 in 1907. Brazil is the Argentine's best customer for flour, having imported 84,000 tons in 1904, 103,000 in 1905, 114,000 in 1906, and 118,300 in 1907.

Great Britain was the second-best customer for flour, having imported 14,800 tons in 1904, 24,400 in 1905, 5400 in 1906, and 1200 in 1907; to-day the exportation is negligible.

It is estimated that there are 600 or 700 flour-mills in the Argentine, representing a capital of from £2,200,000 to £2,640,000. Buenos Ayres has two, which have been lately installed on American models. They are situated on land belonging to Madero Harbour, and comprise a fine and powerful equipment, with grain-elevators, silos, and granaries. One is the property of the Belgian Steam Flour-mills Company, and has a capacity of from 12,000 to 14,000 tons. The other,

with a capacity of 80,000 tons, was built by the efforts of two great railway companies, the Buenos-Ayres Rosario and the Central Argentine. We have seen that no less important installations are shortly to be built at Rosario, by the French company which holds the harbour concession.

The Refrigerating Industry.—Among all the Argentine industries the most important is that of chilling or freezing meat and other foodstuffs. It is gradually replacing, in the export markets, the salt meat or *saladeros* industry, which formerly was the only industry in the country dependent upon stock-raising. The latter industry is carried on principally in Buenos Ayres, Santa Fé, Entre Rios, and Corrientes.

The principal refrigerating establishments are the following:—

The Sansinena Frozen Meat Co., with a capital of £600,000, and the warehouses known as La Negra, at Buenos Ayres and Bahia Blanca, in the quarter known as *Cuaterros*.

The River Plate Fresh Meat Co., with a capital of £453,600, whose warehouses are in the Province of Buenos Ayres.

The Palmas Produce Co., which is a component part of James Nelson & Co., and has a capital of £500,000, exploits the district of Campana.

La Blanca, with a capital of £300,000, established at Buenos Ayres.

The Plata Cold Storage Co., with a capital of £403,805, situated at La Plata.

Recently another refrigerating establishment has been inaugurated at Zarate, the property of the *Smithfield and Argentine Meat Co.*, with a mechanical equipment allowing 150 bullocks and 600 sheep to be killed per diem. Its capital is £200,000.

To this list we may add the *Kemmerich Products Co.*, which manufactures extracts of beef. Its capital is £480,000, and it is established at Santa Elena, in the Province of Entre Rios. This company owns 2700 square miles of land, 340,000 cattle, 20,000 horses, and 50,000 sheep.

The exports of the refrigerating establishments for the last seven years are given in the following table, which shows the enormous increase in the export of quarters of beef during the last few years.

Exports of Frozen Meat (1901-1908).

	1901		1902		1903		1904		1905		
	Whole Sheep	Quarters of Beef	Whole Sheep	Quarters of Beef	Whole Sheep	Quarters of Beef	Whole Sheep	Quarters of Beef	Whole Sheep	Quarters of Beef Frozen	Quarters of Beef Chilled
Sansinena Frozen Meats Co. ..	985,294	157,740	1,289,628	304,108	1,072,248	291,621	1,207,801	242,940	1,002,146	332,302	59,555
River Plate Fresh Meat Co. ..	927,648	170,123	1,120,263	301,881	1,000,562	370,663	855,039	335,136	680,836	204,436	174,282
Las Palmas Produce Co. ..	809,785	170,512	1,019,331	224,224	1,095,678	291,266	1,056,996	312,870	867,832	297,099	29,099
La Blanca ..	..	..	..	..	213,112	42,513	424,486	178,709	244,299	177,470	38,408
The La Plata Cold Storage Co. ..	..	..	..	..	..	..	123,456	140,343	369,299	350,096	100,423
The Smithfield and Argentine Meat Co. ..	..	..	..	..	..	..	..	..	35,850	30,300	24,304
Rio Seco ..	..	..	..	..	..	..	..	..	97,248	14,976	..
The Frigorifique Uruguayenne ..	..	..	..	..	..	..	..	..	96,846	64,601	..
The Frigorifique Argentine ..	..	..	..	..	..	..	..	..	126,882	..	..
	2,722,727	498,375	3,429,222	830,213	3,381,600	996,023	3,673,778	1,209,998	3,489,218	1,511,631	426,002

Sansinena Frozen Meats Co. ..
 River Plate Fresh Meat Co. ..
 Las Palmas Produce Co. ..
 La Blanca ..
 The La Plata Cold Storage Co. ..
 The Smithfield and Argentine Meat Co. ..
 Rio Seco ..
 The Frigorifique Uruguayenne ..
 The Frigorifique Argentine ..

	1906		1907		1908		
	Whole Sheep	Quarters of Beef Frozen	Quarters of Beef Chilled	Whole Sheep	Quarters of Beef Frozen	Quarters of Beef Chilled	Quarters of Beef Chilled
Sansinena Frozen Meats Co. ..	773,243	300,605	67,996	812,624	237,821	35,882	65,497
River Plate Fresh Meat Co. ..	553,589	249,071	163,624	419,186	221,009	128,359	185,294
Las Palmas Produce Co. ..	664,860	320,064	32,370	669,525	255,797	283,627	58,468
La Blanca ..	119,370	191,284	68,118	537,451	207,548	106,941	158,936
The La Plata Cold Storage Co. ..	454,879	245,046	84,476	537,451	207,548	99,129	218,983
The Smithfield and Argentine Meat Co. ..	14,172	110,579	38,705	34,679	118,041	40,675	81,302
Rio Seco ..	104,047	..	..	261,335	101,792	..	..
The Frigorifique Uruguayenne ..	63,311	17,521	..	142,070	76,475	..	..
The Frigorifique Argentine ..	252,918	146,410	..	124,890	..	..	21,768
San Gregorio ..	..	..	..	..	..	..	..
	3,000,399	1,580,589	455,459	3,052,699	4,403,835	439,613	789,348

Sansinena Frozen Meats Co. ..
 River Plate Fresh Meat Co. ..
 Las Palmas Produce Co. ..
 La Blanca ..
 The La Plata Cold Storage Co. ..
 The Smithfield and Argentine Meat Co. ..
 Rio Seco ..
 The Frigorifique Uruguayenne ..
 The Frigorifique Argentine ..
 San Gregorio ..

The capital invested in the refrigerating industry, including both share capital and loans, is estimated at £4,449,825. The profits obtainable may be judged by the dividends paid by the most important of the refrigerating companies: the Sansinena Frozen Meats Co., in 1902, paid 50 per cent. out of the exceptional profits realised by the sale of cattle in South Africa during the Boer war. Since then the dividends of this company have fallen to 10 per cent.

Another cause of the development of this industry is the closing of English ports against cargoes of live cattle, for fear of anthrax. It is by the help of this prohibition that the refrigerating companies have conquered the English market, which to-day takes up the greater part of our frozen meat, as before it took our cattle. Steps have of late been taken with a view to re-opening the ports under a pledge of sanitary measures; but nothing decisive has been done, on account of the protests of English cattle-breeders, and also of the refrigerating companies, most of which have been created by English capital.

The Dairy Industry.—Among the industries connected with cattle-breeding there is one which, without having the same importance as the industry dealt with above, has yet a certain margin of development. This is the dairy industry, with its derivatives, butter and cheese-making.

The Argentine breeders having imported excellent Durham or Dutch milch-cows, the dairy produce is of the finest quality.

Large establishments, of which one, *La Martona*, belongs to a private company, have been installed for the purpose of supplying the city of Buenos Ayres with milk. It is estimated that the daily sale at the counters of *La Martona* amounts to 10,000 glasses; the sales of *La Marina* amount to 6000, and of *La Granja Blanca* to 10,000 glasses. All these approximate figures refer to the summer only, and the sales across the counter by the litre, for family consumption, and the house to house distribution, are not included in these figures. Besides the above establishments there are many cow-keepers in the city, as well as dairymen who receive their milk by rail.

As for butter and cheese, it was estimated at the time of

the census of 1895 that there were 357 establishments devoted to this industry. In the matter of butter the Argentine does more than suffice to itself—though ten years ago this was not the case—but to-day it exports considerable quantities to England, Brazil, and South Africa.

To give the reader some idea of the dimensions which the butter-making industry may attain in the future, we need only cite the following data:—

According to the national census of 1895 there were 22,000,000 cattle in the Argentine Republic, of which only 1,200,000 figured as milch cows; the value of the latter being not less than £14,000,000. Butter-making and cheese-making were very restricted industries, especially the former, and the statistics of 1895 mention an export of only 500 tons. But the impulse was already given; and the combined efforts of agriculturalists and cattle-breeders, directed towards the improvement of the bovine species, were about to give an extraordinary impetus to the butter-making industry. Let us see how the situation has improved between 1895, the time of the last national census, and 1908, the year in which the agricultural and pastoral census was taken.

This latter inventory has shown that in 1908 the Argentine Republic contained 29,119,625 head of cattle, of which 2,163,900 were milch cows and 12,825,904 were cows employed for breeding purposes. That is, considering the milch cows only, we do not find a very extraordinary increase since 1895, although all agricultural and pastoral industries have undergone such a remarkable development. It is extremely probable, however, that a certain number of milch cows are counted among the cows employed for breeding purposes, as the latter do produce milk, whether for consumption on the farm or for commercial purposes. Here are the figures of the exportation of butter from 1895 to 1908:—

Year.	Number of Tons Exported.		Value.
1895	...	494	£24,720
1896	...	903	45,160
1897	...	600	29,980
1898	...	927	46,320
1899	...	1,179	58,980
1900	...	1,056	52,740
1901	...	1,510	75,500

Year.			Number of Tons Exported.	Value.
1902	...	...	4,125	£253,580
1903	...	...	5,350	426,580
1904	...	...	7,459	423,560
1905	...	...	5,393	431,460
1906	...	...	4,405	352,400
1907	...	...	3,035	242,800
1908	...	...	3,550	284,000

These figures are sufficiently satisfactory, but they are far from representing the possibilities of the future, when the improvement of breeds and the establishments of new creameries will permit of the manufacture of butter on a far larger scale.

Among the present stock of 30,000,000 cattle there ought to be a proportion of at least 45 per cent. of milch cows, or 12 millions; at the very least 8 millions. Counting upon a daily yield of 17·6 pints of milk per cow, valued, in its original state or in the form of butter or cheese, at 2d. per litre, or 1·136d. per pint, we obtain a sum of £64,000 per diem, or £23,000,000 per annum.

But these calculations are purely theoretical. One thing, however, we can say to the credit of the country, and that is that its dairy industry is admirably adapted to the requirements of a great city such as Buenos Ayres, which must perforce obtain that essential aliment, milk, under the most favourable conditions of price and quality. An extremely perfect equipment enables the industry to utilise its by-products. The problem is not whether the Argentine can produce such a quantity of butter, but to whom it can sell it, for in America Brazil is its only customer, while in Europe it has to struggle against the competition of such countries as France or Switzerland, which countries it would be difficult to displace.

As for cheese, we quote only from memory; its production is practically limited by local requirements. The most important establishment in this line is that belonging to Señores A. & R. Luro, on their estate, San Pascual del Moro. Here the "moro" cheese is made, an imitation of the Roman cheese, which is consumed in large quantities by the Italian colony.

Breweries.—Although not directly dependent upon the produce of the soil, since the country produces no hops, and,

very little barley, we will nevertheless mention the industry of brewing, as one which is at present in a prosperous condition. It is undertaken by a number of limited liability companies, of which the most important, due to the initiative of M. Bemburg, is the *Brasserie Argentine de Quilmes*, a French company with a capital of £360,000, which brews about 3,960,000 gallons of the 8,360,000 gallons consumed by the nation.

Next, with a much smaller output, comes the Bieckert Company, with a capital of £362,880, and an output (in 1904) of 1,349,390 gallons; the *Cerveceria Palermo*, with a capital of £132,000, and an output of 1,264,690 gallons; the *Rio Segundo*, in the Province of Córdoba, with a capital of £80,000, and an output of 423,810 gallons; and the *Fabrica Nacional de Cerveza*, with a capital of £120,000, and an output of 540,540 gallons.

Here are the statistics of production and consumption for the last six years of the thirty-two Argentine breweries:—

Year.		Production (pints).	Consumption (pints).
1902	... ..	49,096,235	46,933,520
1903	... ..	57,043,272	56,360,350
1904	... ..	65,663,824	65,077,538
1905	... ..	94,264,637	86,833,214
1906	... ..	113,967,478	113,898,794
1907	... ..	123,404,693	115,746,857
		<u>503,440,139</u>	<u>484,850,273</u>

The national product has won a complete victory over the foreign article, the importation of which is now negligible: and it has also popularised the liquid dear to Gambrinus, which ten years ago was still a luxury. One can only regret that agriculture, whose development has of late been so enormous, has not as yet liberated the brewery from the necessity of going to the foreigner for his malt, a product of barley which is the principal raw material of beer. Hitherto, according to Girola, the native barleys have been very little used, as they are not appreciated as they deserve to be; and the growers, on the other hand, have not taken sufficient pains to produce a good brewer's barley. We must hope that this situation will soon be changed, and that more pains will be taken in the numberless fertile valleys of the Argentine in the growing of barley and its improvement.

Spirits.—The production of alcohol, unlike that of other industrial products, is rapidly decreasing. In 1907 only 3,823,336 gallons were produced, while in 1897 the production was nearly 6,600,000 gallons. But we must not forget that the duty, which was originally 7 centavos per litre (6·72d. per gallon), was in 1898 increased to 1 piastre per litre, or 8s. per gallon; nearly five times the prime cost of the spirits.

Weaving.—In concluding this sketch of the chief industries of the country which are connected either with agriculture or stock-raising, it is not out of place to speak of those which, although so far scarcely developed, may do better in time under favouring circumstances.

With the development of cotton-planting and a plentiful supply of wool, it seems that a large number of looms might be profitably established and operated in the Argentine. But hitherto this industry, of prime importance though it be, has been held in check by the expense of the necessary machinery and of coal, which has to be imported from abroad, and the scarcity of labour.

Tanning.—This industry too, ought in time to occupy a place of far greater importance than it does now; for the raw materials—hides and quebracho, the best of tanning media, are present in abundance. To understand the stationary condition of this industry we must remember that it would require a considerable spare capital, as the hides have to remain in the vats for several months, during which time the tanner has need of capital at low terms of interest, which up to the present time has not been available in the Argentine.

Quebracho Wood.—Considering its future prospects, we must give a special place to the industry which exploits quebracho timber; converting the balks into railway sleepers, or extracting their tannin.

Red quebracho is found scattered profusely through the hundreds of square leagues of the country known as the Chaco, which is situated between 24° and 28° of south latitude, and 59° and 64° of west longitude, and also in the Provinces of Santa Fé, Santiago de l'Esterio and Corrientes. The Chaco quebracho is superior to that of Santiago, which has the misfortune to grow in nitrous

alkaline soil, where the trees do not reach any considerable dimensions. The Tucuman product is good, as it grows in a damp soil, when it grows well and is full of sap. Best of all is the red quebracho of Chaco; it is the richest in tannic products; according to an analysis made in the United States, it contains 30 per cent. of tannin, while the Santa Fé product contains less than 26 per cent.

Although quebracho wood is absolutely impervious to rot, and may thus be used in building, for piles, quays, sleepers, etc., it is exploited more especially for the production of tannin, as more profit is made by so treating it. A sleeper requires a good-sized log, considerable time, and much labour, to say nothing of the loss of wood; while the quebracho extract may be obtained from logs of any size. To-day the value of a sleeper, loaded on the track, is worth 6s. 2d., while three times as much may be made by extracting the tannin. For this reason the principal companies engaged in the quebracho trade have abandoned the manufacture of sleepers, so that certain railway companies—the Buenos Ayres Western, for example—have had to content themselves with iron sleepers.

Until quite lately quebracho wood was sawn into large round or squared balks, which were then sent abroad, chiefly to Germany, where the tannin was extracted. During the five years, 1899-1903, 1,044,000 tons of logs were exported; in 1903, 200,201 tons; in 1904, 252,723 tons; in 1905, 285,897 tons; in 1906, 230,000 tons; in 1907, 246,514 tons; and during the first six months of 1908, 127,609 tons. Various foreign and native companies were formed, with large capitals, to convert the wood into extract of tannin, and to export it in this form.

These companies are: the *Compañía Industrial del Chaco*, with a capital of £348,000 and two factories; one at Las Toscas, in Santa Fé, with a monthly output of 1000 tons of extract, and one at Calchagin, in the same Province, which produces 600 tons per month. These factories are equipped with German plant.

This company enjoyed a season of great prosperity in 1904; although its factories produced only 12,000 tons of extract instead of 36,000, as they could have done, a dividend

of 42 per cent. was declared. Since then the lack of outlet and the low prices have paralysed the development of this industry.

Another tannin factory, able to produce 250 tons of extract, has been established by Herwig Brothers at Pehuajó, Province of Corrientes.

The *Compañía Industrial del Chaco* is also about to erect, at Resistencia, a factory with a capacity of 300 tons of extract per month.

El Quebracho is the last of the companies established for the extraction of quebracho tannin, and this also began to work under the most auspicious financial conditions. Its factories are installed at Fives-Lille, Province of Santa Fé, on land belonging to the "Kemmerich Products Co."; these have been equipped with the most perfect machines of German make. The capital of this enterprise amounts to £32,000, which it is hoped will be repaid by the profits of the first few years. The monthly output is 450 tons.

The *Mocovi Tannin Co.*, floated with a capital of £60,000, has a factory some 60 miles east of Los Amores (Santa Fé), and has a capacity of 300 tons per month.

The firm of *Hardy & Co.*, of Las Palmas, near Resistencia, own a factory which cost £50,000, and produces 200 tons of extract monthly.

The *Formosa* company, which deals in timber and quebracho tannin, has a capital of £200,000. This company owns 96 square leagues of forest—some 880 square miles—which are estimated to contain 2 million tons of quebracho. This company intends to establish a factory capable of producing 15,000 tons of tannin yearly.

The *Compañía Azucarera de Resistencia*, with a capital of £22,700, produces 80 tons of extract monthly, and the factory of *M. Benito Pinasco*, at Guaycurú, on the Santa Fé railway line, produces 30 tons.

Besides these factories, Señors Charles and Joseph Casado, the Argentine owners of 2800 square leagues of land (over 25,000 square miles), in the Paraguayan Chaco, have established two factories, one at Puerto Casado and the other at Puerto Sastre, which produce, respectively, 500 and 1000 tons of extract per month.

The average yield of quebracho wood is 25 per cent. of extract; but as the extract contains a number of resinous and colouring matters, which must be eliminated during the process of manufacture, the net yield is 22 to 23 per cent. of solid extract containing 20 per cent. of water, which contains 70 to 73·5 per cent. of tannic oxide—that is, pure tannin.

The system employed in extracting the tannin is based upon diffusion. Firstly, the wood is reduced to powder by means of machines which cut or saw the wood, into which the logs are fed entire. Then, when the wood is converted into sawdust or fine chips or shavings, it is passed through extractors or diffusers, which separate the cellulose from the tannin, which is finally concentrated to the degree demanded by the market by means of vacuum pans.

During five years, from 1904 to 1908, the exports were: 20,111 tons in 1904; 29,408 tons in 1905; 30,839 tons in 1906; 28,190 tons in 1907; 48,160 tons in 1908.

Germany and the United States are the chief buyers of this valuable product, which forms the principal wealth of the northern part of the Argentine.

In the first edition of this book we prophesied a rapid and prosperous development for this industry, which had already received a considerable impetus; unhappily this prediction has not been realised in practice, and the quebracho industry has suffered, not precisely a crisis, but a diminution of its outlets which has seriously prejudiced its interests.

This trouble is due to various causes. Firstly, the ruinous competition between the various firms producing quebracho tannin; a competition which has now happily disappeared, thanks to an arrangement concluded between the principal companies, on the initiative of M. Hermann Schlieper; secondly, to the almost prohibitive duties which the German Government has imposed upon the importation of the product; thirdly, the indifference shown by the railway companies in using on their permanent way sleepers of steel rather than of quebracho, although the latter is more durable. It is to be hoped, however, that in course of time these

causes will disappear, and that this industry will in future recover all the elements of progress.

The Timber Industry.—Another industry which is equally dependent upon the forestal wealth of the Argentine is that whose object is the exploitation of the various and valuable kinds of wood to be found in various parts of the country, especially in the forests of the Chaco and of Formosa.

The variety of costly woods to be found in these forests is astonishing. Recently more than thirty-three species have been classified, all of industrial value ; the best known, besides the quebracho, being the acacia, algarrobo, button-tree, lapacho, bay, the smaller cedar, and many other varieties, black, white and red.

To exploit this forestal wealth a limited company has lately been formed with a capital of £352,000, which proposes to erect two important saw-mills in the Chaco. This company already owns about 2300 square miles of forest, and is thinking of increasing its domain by further purchases.

Fisheries.—Finally, quitting the forests for the seas, we must mention one other industry, at present unimportant, but apparently capable of considerable development : namely, the sea fisheries.

Owner of an immense coast-line bathed by the southern seas, the Argentine has an appreciable store of wealth at her disposal ; which so far has been drawn upon only in a modest and almost secret manner, but which is now beginning to attract attention, to the great benefit of the country and of those who have entered upon this industry.

Since Prof. Nordenskjöld wintered in Antarctic waters, Captain Larsen has been able to report a source of great wealth, which can be easily and profitably exploited, in the fishing of these waters ; and upon his arrival in Buenos Ayres he put himself in communication with a group of Argentine capitalists, who decided to form a limited company by the name of *La Pesca*, with a capital of £32,000.

The results of the first season's fishing was so productive, and the number of whales harpooned and "cut in" so large, that, according to a report which has been sent us, this company was able, at the end of the first year, to return the capital sunk in the firm of dividends.

Naturally such results cannot fail to draw new adventurers into this industry, which in turn will increase and develop the wealth of the country, at the same time procuring for the country a class of men formed by the strenuous labour of Antarctic life ; a class of which the young Argentine navy has the greatest need.

CHAPTER III

MINES, ELECTRICAL AND OTHER INDUSTRIES

The Argentine has not entered the industrial age—She has no coal-mines in operation, no natural motive forces of any importance.

MINES—Symptoms of the awakening of the mining industry—Numerous lodes in the Andes—The mines of La Rioja and Catamarca—Mines in other provinces and territories—Mining legislation.

ELECTRIC INDUSTRIES—Tramways ; their development, their perfected equipment, and their profits—Progress of electric lighting—Telegraphs—Telephones.

VARIOUS INDUSTRIES—List of various industries established in Buenos Ayres, according to the last census, with the value of their products.

Comparison between the statistics of 1895 and those of 1904—Progress realised in 1908—Workshops and factories.

THE Argentine Republic, as we have already on various occasions explained, has not yet entered upon the industrial phase. All its capital and all its energies tend toward the exploitation of the soil, and as the results are greater than the boldest speculator could have predicted, the country has no need at present, with its small population, to launch itself into the unknown by entering the province of industry.

Moreover, the Argentine does not so far possess coal or iron measures easily workable, and has very little labour at its disposal, and therefore should not disperse its activities among too many objects. It is its best policy to limit itself to producing articles that it can make more cheaply than the foreigner; not artificially to develop its industries in the shelter of an ultra-protectionist tariff. It would fall to the consumer to pay for such products of the national industry, and the state would lose a serious portion of its revenues.

In other words, we may well ask whether the Argentine, in addition to its agricultural wealth, should pretend to a great industrial future, like that of the United States.

So far we cannot reply in the affirmative; not, at least, under present conditions. However rich the subsoil of the country may be, a matter at present uncertain, especially in respect of coal and iron measures, which are the basis of all industries, we must remember that the majority of these measures are situated in the region of the Cordillera, 4000 to 5000 feet above sea-level, over 900 miles from the coast, far from roads or waterways, and are consequently very badly situated for the establishment of industrial centres.

What coal and iron the Argentine may possess is distributed over a region of some thousands of miles in extent, which does not appear to contain continuous lodes or measures, and in which there are no real valleys or river-basins. Putting all questions of tariff aside, but considering the constant lowering of freights, we think the Argentine will always find it cheaper to obtain its supplies from abroad, except such as it can produce economically, rather than attempt to embrace all industries in its dreams of greatness.

Neither can we expect from the utilisation of natural motive forces a development which might in some degree compensate for the absence of fuel. There are a few waterfalls in Córdoba and in Tucuman, but such energy as they might furnish would hardly allow one to hope much from their adaptation to industrial uses. One of the most important of these falls is that below the Barrage San Roque, in the Sierra de Córdoba; it belongs to the North American Company, "Luz y Fuerza" (Light and Force). The company's plant gives a yield of about 3000 horse-power, which is employed, for the greater part, in providing light and motive power to the town of Córdoba, and also for the production of carbide of calcium. Another installation, belonging to the Molet Company, has a capacity of some 700 or 800 horse-power, which is employed in the same manufacture.

The falls of the Yguassu, on the upper Parana, some 230 miles above Corrientes, on the confines of Brazil, Paraguay and the Argentine, have been described as a marvel of nature. It would seem that these falls represent a force three times greater than Niagara; their width is 12,000 feet, or more than two miles, with a fall of 212 feet. Unfortunately this

cataract is on the border of the Argentine territory, in a region of forests accessible only with difficulty, and will probably flow for many years yet before any one profits by this enormous natural source of power.

Mines.—Although the industrial future of the Argentine is as yet by no means clear, we must admit that during the last four years there has been a livelier movement in favour of gold, silver, and copper mining, which has resulted in the flotation of several important limited companies. It was to support these first steps that the Government built an aerial railway—one of the boldest works ever attempted in the whole world—to exploit the rich mines of Famatina.

“Over the whole stretch of the eastern slopes of the Andes,” says an important official publication* which we take for guide, “from Bolivia to Tierra del Fuego, the existence of numerous mineral-bearing regions is proved; notably in the Provinces of Mendoza, San Juan, La Rioja, Catamarca, Salta, Jujuy, Tucuman, Córdoba, and San Luis, where traces of ancient mineral workings have been discovered.”†

There are many villages which ever since the Spanish Conquest have drawn their sustenance from the gold and silver which their inhabitants obtain, by rudimentary processes, from the beds of stream or river, and by plain mining. Also, despite the difficulties of transport, various well-organised companies have obtained very fair results from their workings, since they obtained their concessions a few years ago. Now that the feelers of the railway systems have reached these districts, and the mining companies have established aerial cable-ways to connect them with the mines, we can already perceive a greater vitality in this industry.

In addition to the wealth of the Cordillera, prospectors are discovering new lodes in the interior of the country; but, as always happens, miners prefer to gather in already familiar

* *Description sommaire de la République Argentine comme pays d'immigration*, 1904.

† The Argentine lost much of its mineral wealth when Potozi and La Paz were lost to Bolivia.—[TRANS.]

districts, rather than undertake long journeys, and the labour of prospecting at their own expense.

The best-known mines of the Argentine are distributed as follows:—

In the Province of *Mendoza* there are mines of copper, silver-bearing galena, gold-bearing quartz, coal, alabaster, slate, and marble, and wells of petroleum; in the Province of *San Juan*, of gold-bearing quartz, silver, copper, antimony, coal, sulphur, and amianthus.* In view of the development which this region may undergo through the exploitation of the coal-measures, the Great Western Railway has decided to construct a branch line as far as the coal mines of Salagasta (Mendoza).

The Province of *La Rioja* has been known for a long time for its rich mines of metallic silver, and also for its copper mines, whose ores contain a high percentage of gold and silver; and for its gold “placer” mines. It is to facilitate the working of these mines that the aerial cable-way is being constructed, which will unite Cerro de Famatina and the mining centre of Chilcito with the railways. Here, as everywhere, skilled miners are somewhat scarce.

The Province of *Catamarca*, the centre of the Capillitas mining country, possesses copper mines with a high percentage of silver and gold, which have been worked for more than thirty years. These mines, which are, it appears, very rich in minerals, have been acquired by a foreign company, and will be the object of an important enterprise; here, too, an aerial cable-way will be built to transport the ore from the mines to a lower level.

There are also in this region two important smelting works; “Le Pileian” and “La Constancia,” which are buried in the depths of the forests of carob-trees, which furnish abundant fuel. In other parts are found surface veins of copper, silver-bearing galena, bismuth, antimony, mica, gold-bearing quartz, as well as “placer” mines and coal-measures.

The Provinces of *Salta* and *Jujuy*, which possess rich veins of auriferous quartz, argentiferous galena, copper, borate of

* Amianthus—the best quality of asbestos.—[TRANS.]

lime, lignite and petroleum, are famous for the gold obtained from the streams that descend from their mountains. Undertakings have been formed with foreign and native capital, and profitable results are expected. The extension of the Argentine railways to Bolivia will still further develop the exploitation of mining districts all through this region.

In former times silver mines were worked in the Province of *Tucuman*. In Aconquija also we find mines of copper which must be a continuation of those of Catamarca.

The Provinces of *Córdoba* and *San Luis*, besides ascertained veins of gold-bearing quartz, galena and copper, contain mines of manganese and wolfram, and well-known quarries of marble, and of onyx, both green and of other shades.

In the Territories of *Tierra del Fuego* and *Santa Cruz* the sands along the Atlantic coast contain, especially after storms, an abundance of gold in powder and small nuggets, whose extraction gives employment to numbers of workers.* There also are seams of lignite and of peat. Finally, in Santa Cruz there are several salt workings, the produce being sent to Buenos Ayres.

The River *Chubut*, in the Territory of Chubut, brings down fine gold along its bed, as do its numerous small tributaries, which rise in the Andean slopes. The presence of gold more than 100 miles from the Cordillera tempted some colonists to organise an expedition; at the foot of the mountain they found gold in nuggets.

Another company exploits the salt pits of the Valdez Peninsula, and another the quarry of flat granite slabs, known as the Atlas Quarry.

For many years now large quantities of gold have been found in the rich "placers" of the Territory of Neuquen, where copper also has been discovered, silver-bearing galena, coal, and petroleum. The gold taken out of the washers of Villa Michicó and the neighbourhood is estimated at 330 lb. avoirdupois annually.

* A few years ago a company was formed with North American and Argentine capital to work the sands in this manner in Tierra del Fuego.

In the Territory of *Rio Negro* there are abundant quarries of gypsum, limestone, and other building materials; in that of the *Pampa Central* copper has been recently discovered and is being worked; in that of *Misiones* there is native copper, iron, and manganese; in that of the *Andes* (Puña de Atacama), there are immense deposits of borate of lime, as well as veins of quartz and "placers."

Considering the vast extent of these territories, which have never been seriously explored except at a few points, we have every reason to believe that it will be many years before we have even an approximate knowledge of the mineral wealth they contain; but the data gathered up to the present time augur well for the future of the mining industry in the Argentine.

We will add finally, as a further reason for success, the fact that the law regarding mines is remarkably liberal; the State may not exploit them on its own account, but concedes them to any adult applicant capable of administering his own property.

The same mining laws are in force throughout the country. To acquire a claim it suffices to present a written demand, containing an exact indication of the position and nature of the claim demanded, the details of its discovery, and all other useful information, accompanied by a sample of the mineral. Immediately upon the presentation of this demand the administration enters it with the date of deposition, in order to prove the right of priority; and directly the concession has been surveyed and delimited, the claimant has full rights in his mine and may dispose of it as he wills. The mine is untaxed, and so are the mineral products, whether sold at home or abroad. The only obligation imposed upon the miner is that he shall work his mine with at least four miners during 230 days of the year; if this condition be not fulfilled, any other person may demand the concession of the abandoned mine.*

* Senator Domingo Perez has just laid before Parliament a projected law substituting a fine or tax for this obligation.

The Electrical Industry.—It is greatly to the credit of the Argentine that everything that makes for progress, for an increased welfare or greater convenience, is immediately applied by the Republic. The latter quickly absorbs all improvements and, profiting by the experience of older nations, immediately puts new procedures into practice, instead of lingering in the rut of outworn systems. Thus it was, for example, in the case of the electrical industry. The Argentine has no need, in this respect, to envy the most advanced nations. In Buenos Ayres—for only the large centres can be progressive to this extent—all the tramway and electric lighting concerns are most excellently equipped, and are in this matter equal to the best installations of England or the States.

The electric tramway companies, whose tracks cross Buenos Ayres in every direction, are seven in number, forming a network of lines which are distributed as follows:—

The “Anglo-Argentine” Company, 18·8 miles; the “Capital” Company, 34·7 miles; the “Metropolitan” Company, 19·8 miles; the “Grand National,” 76·9 miles; the “Compagnie Lacroze de Buenos Ayres,” 44 miles; the “Southern Electric Tramways, 49 miles; and the Harbour and City of Buenos Ayres, 6·8 miles.

The great event of 1908 was the amalgamation of these companies by the “Anglo-Argentine,” which proposes to unite these lines under a single management, in order to form a vast network, comprising all the principal lines, with the exception of the “Compagnie Lacroze” and the “Harbour and City of Buenos Ayres.” The total capital invested in this important undertaking amounts to not less than £14,000,000.

It is to be hoped that this great financial operation, which will place the Anglo-Argentine Company at the head of the most important tramway companies of the world, will not fail to benefit the public, and that the Company will also turn its attention to improving its equipment and to lowering its fares to a uniform rate.

On the other hand the number of passengers carried by

the Buenos Ayres tramways is constantly increasing, as may be seen in the following table:—

Year.	Passengers Carried.		Gross Profits.		Total Profits.
	Horse Traction.	Electric.	Horse Traction.	Electric.	
1901 ...	95,436,421	30,088,803	£848,318	£294,822	£1,143,140
1902 ...	92,638,025	33,593,734	827,979	334,060	1,162,039
1903 ...	71,048,519	62,670,779	636,801	596,719	1,233,520
1904 ...	65,532,745	82,746,352	587,022	805,071	1,370,093
1905 ...	34,486,547	174,455,022	489,741	1,049,949	1,539,690
1906 ...	24,927,089	175,773,158	232,903	1,565,472	1,798,375
1907 ...	7,338,563	217,702,183	67,659	1,926,054	1,993,793
1908 ...	293,269	254,780,627	1,980	2,229,547	2,231,527

These figures go to confirm all we have said as to the enormous development of capital in the Argentine, and of its commercial activity.

Electric Lighting.—In the matter of illumination, Buenos Ayres was early discontented with the old methods; electricity is now preferred both for public and private purposes. To-day there are 721 miles of gas pipes and 233 miles of electric cables.

The capital of the electric lighting companies is estimated at nearly £2,000,000, and their output at 30,905 horse-power. The electrical supply is chiefly in the hands of the German Electricity Company, with a capital of £1,850,000, which has already absorbed the two companies previously in existence. Its equipment was furnished by the famous firm of Siemens Halske, which stands in the front rank of German electrical manufacturing firms.

Telegraphs.—Another mark of progress is the continual extension of the telegraphic system. The national, provincial, and private lines together represent to-day a length of 31,215 miles, of which 15,125 belong to the State; twenty years ago the mileage was barely half this figure.

As for telegraphic communication with the exterior, there are two foreign cable companies, one possessing the cable running to the United States *via* Galveston, and the other that communicating with Europe *via* Madeira. Communication between London and Buenos Ayres is now established in about forty-five minutes, while a few years ago the average was five hours.

Telephones.—The telephone is used in the capital and the principal towns—Rosario, Córdoba, Santa Fé, Tucuman, Mendoza, etc. Buenos Ayres is connected by telephone with Montevideo (124 miles), Rosario (190 miles), and will shortly be connected with Bahia Blanca (437 miles). The two companies established in Buenos Ayres, the “Telephonic Union of the Rio de la Plata” and the “Co-operative Telephonic Company,” represent a capital, respectively, of £243,963 and £582,032.

All these data, which we merely mention in passing, go to prove that the Argentine has assimilated all the details of industrial progress, even in their most improved forms. Experiments in wireless telegraphy are now being made with a view to communicating at long distance with the steamers leaving or approaching Buenos Ayres.

Various Industries.—At the end of 1908, according to the statistics of the official industrial census of that year, which was undertaken by the Department of Commerce in the Ministry of Agriculture, there were, in the city of Buenos Ayres, 10,349 factories or workshops, representing a capital of £23,443,144. The sales of these factories, etc., for 1908, amounted to £47,048,773. The raw material consumed was worth £25,223,681. The motive power employed in these factories was equivalent to 105,575 horse-power, and the number of workers employed was 118,315. Of the owners, 14·8 per cent. were of Argentine nationality.

If we compare these figures with those of the municipal census of 1904, we obtain the following results:—

	Census of 1904.	Census of 1903.
Number of factories and workshops ...	8,897	10,349
Capital employed	£8,733,127	£23,443,144
Sales	£16,143,832	£47,048,773
Motive power consumed (H.P.) ...	19,458	105,575
Workmen employed	68,512	118,315
Raw material consumed	—	£25,223,681
Masters or owners of Argentine } nationality (per cent.) }	12·35	14·81

We see that even in four years there has been a remarkable development of the industries of Buenos Ayres. This development is especially demonstrated by the increase of

the capital represented by the sales of merchandise or manufactured articles and by the horse-power employed. At the end of four years the capital has increased by nearly 300 per cent., the sales by the same amount, and over five times the motive power is employed.

This progress is certainly remarkable, but it does not perhaps truly represent the actual progress achieved. The Director of the Census, Señor Ricardo Pillado, declares that "the general opinion prevalent in the offices of the census department is that certain important items of information, relating to matters of great interest, have been concealed by interested persons. Among such we may cite the value of output, the amounts of sales, the capital employed, the number of employés, etc.; as the manufacturers are anxious, above all, to shelter themselves from a possible increase of taxation or licences." So that in spite of the satisfactory results of the last census, in spite of the notable increase of wealth and industry recorded, the figures given are far from representing the true significance of the industries of the capital city.

The results already given may be classified as follows, under the headings of the kind of industry, capital employed, value of produce, motive power, and employés engaged:—

Industries.	Capital.	Value of Production.	Number of Hands Employed.	Motive Power (H. P.).
Gas lighting, electric lighting, lighting installations, and plant	£6,712,470	£2,227,376	4,754	66,392
Alimentary products	3,873,386	10,520,532	14,227	11,756
Clothing and toilette	3,256,512	9,156,774	37,259	2,586
Woven fabrics, leather and furs	1,967,672	5,084,053	10,861	5,451
Metal work, etc.	1,598,722	2,916,793	10,090	4,311
Graphic arts, paper	1,489,525	2,178,294	8,296	2,758
Woodwork, cabinet-making, etc.	1,461,103	4,336,954	11,736	5,570
Tobacco factories	605,487	2,249,836	2,829	539
Chemical products	432,160	754,207	1,774	1,231
Building	408,056	1,097,219	4,415	719
Art products, ornaments, etc.	301,244	729,903	2,199	367
Various industries	1,364,881	5,779,208	9,875	3,895
Totals	<u>£23,421,318</u>	<u>£47,032,146</u>	<u>118,315</u>	<u>105,57</u>

The establishment of large electric works which furnish current at very moderate rates, as well as the advantages of

electro-motors as compared with steam-engines, have led a number of industries to adopt new systems of motive-power. Of a total of 105,575 horse-power, 12,505 are furnished by electricity, 90,655 by steam, 1939 by gas, and 476 by naphtha.

Among those industries which are still in a state of infancy we must mention the chemical industry; this is limited to a few candle and soap factories, sulphuric and nitric-acid works, scent distilleries, dye factories, etc., whose produce is insufficient to the needs of the country.

The match factories, on the other hand, furnish a good article and are sufficient to the country. The consumption at present exceeds 200 million boxes per annum.

We must also mention the existence of a few paper-mills, glass furnaces, and various works where certain agricultural necessities are produced: such as iron wire, fencing, etc., and also certain wheel factories; but here again importation furnishes a great proportion of the articles consumed.

CHAPTER IV

BANKS, THE BOURSE OR STOCK EXCHANGE, AND LIMITED COMPANIES

BANKS—International character of Argentine banking—Evolution of banking machinery—List of the principal banks, with amount of capital and business done—Conditions peculiar to Argentine banking; the lack of moveable reserves—Rates of interest on account, on deposit, and on advances—Statistics of the deposit accounts of the principal banks—Exchange operations: their decrease since the determination of a fixed monetary ratio—The Clearing House; the importance of its operations.

The Bank of the Nation—Its history—The formation of its capital—Political interference in the nomination of its Directors—Statistics of its accounts—Rapid increase of deposits—Difficulty of realising capital—The resumption of payments.

The Bank of the Province of Buenos Ayres—Its reorganisation—Its present prosperity.

Mortgage and Loan Banks—History of the *Banque Hypothécaire* of the Province of Buenos Ayres—Bankruptcy—Arrangement between the bank and its creditors—Proposal of reorganisation—Laws relating to mortgage in the Argentine—The National Mortgage Bank; statistics of business done—Joint-stock loan companies; their capital and amount of business done.

THE STOCK EXCHANGE (BOURSE)—History of this institution—Its importance; its functions; amount of business done—The decrease in its transactions since the cessation of speculation in currency or the monetary ratio.

The Bourse is a private establishment—Its membership and its regulations—Statistics of business done during the last ten years—Securities quoted on the Buenos Ayres Bourse—Decrease in the total amount of business done during the last five years—The monetary reform of 1901 as a factor of this decrease—The place occupied by the Stock Exchange in the life of the nation.

Joint-stock Companies—The development of joint-stock companies—Legislation affecting such companies—Abuses committed in the formation of such companies, due to speculation—Statistics of capital invested in joint-stock companies before and after the speculative crises of 1890—Revival of such companies, in a sense more consistent with the development of the country.

IN any sketch of the commercial life of the Argentine, we must include the Bourse and the banks, which play an important part in the business life of the community, owing to the facilities which they afford to all kinds of commercial transactions.

To-day such transactions represent a considerable figure, and involve a movement of capital amounting to scores of millions. There is obviously need of an organised body designed to simplify this movement, and to place at the disposal of trade the means of effecting its exchanges with the least possible displacement of capital.

Banks.—It was inevitable that in the Argentine the evolution of banking should be towards an international character, since the trade of the Republic is almost entirely with foreign countries. Moreover, this trade is very largely in the hands of foreigners: French, English, Germans, Italians, Spaniards, Belgians, or Americans from the States; which fact has resulted in the formation, in the city of Buenos Ayres, of various groups of banks, corresponding, in respect of their founders or their capital, to these various nationalities. Each of these establishments is in constant communication with the country of its origin, and seeks to gather round it clients of its own nationality.

Both in the matter of importance and that of organisation the banks doing business in the Argentine leave nothing to be desired. As we shall presently see, the sum of the capitals of all these banks amounts to a total of nearly £26,000,000; a sum which appears to be amply sufficient for all the present requirements of trade.

Working under a system of free competition, and handling a considerable capital, they have been induced to offer greater and greater facilities to trade, in order to increase the number of their clients and the volume of their operations. Moreover, the suppression of the gold premium has removed one of their chief sources of profit; so that they have been forced to obtain, through the extension and perfection of their ordinary banking operations, the compensatory increase of business which allows them to maintain the volume of their profits and their dividends.

One cannot subject these banks to a rigid comparison; each of them conducts its business for the benefit of clients of its own nationality, and in consequence must accede to

their usages. The English banks, for example, have as their clients railway companies, a large number of export houses, and steamship lines, on account of the ties which connect them with the London market and its principal financial groups. The German Bank principally serves German industrial houses, and also German exporters. The French Bank of the Rio de la Plata, owing to its relations with the Paris market, and its strong position in Buenos Ayres, is of inestimable service to French commerce in the Argentine. The Italian banks share the custom of the Italian colony, which, on account of its numerical importance, gives rise to a great deal of small business.

The Banco Español del Rio de la Plata, which has branch establishments in Paris, London, Genoa, and Madrid, is in direct relation with the financial circles of those cities, and facilitates all banking operations between the various Spanish-speaking countries. Founded by the financiers of Buenos Ayres, and afterwards enlarged by French capital, the Spanish bank, which has admirable premises, has succeeded in surrounding itself with a *clientèle* of great landed proprietors, by offering them all kinds of facilities for the conduct of business operations connected with the sale of national produce. Their branch establishment in Paris is the favourite bank of the numerous Argentines who go yearly to Europe on business or for pleasure.

In this congeries of banks the Argentine is represented by two great establishments: one of these, the *Banco de la Nacion Argentina*, is a State institution which, in addition to the business transacted with the Government, runs cash and deposit departments like other banks; the other is the *Banco de la Provincia de Buenos Ayres*, whose origin was in the reconstruction of the historic bank of the same name, the collapse of which was provoked by the terrible financial crisis of 1890. The excellent results of the last three years which we shall presently consider in detail, allow us to predict a brilliant future for this institution.

We shall give, in the following table, a list of these banks, in the order of their establishment, with details as to their capital, reserves, transactions, and dividends.

As lately as the year 1907, it was extremely difficult to

obtain exact information as to the operations of financial establishments, as there was no law obliging them to publish periodical statements of their position. From this state of affairs resulted this curious fact: that if one wished to ascertain the situation or study the operations of the English banks, for example—establishments which effected their business transactions by the aid of funds deposited by inhabitants of the Argentine—one was forced to resort to the records of the London Stock Exchange, in order to examine the reports and balance-sheets presented each year by the administrative Boards to the shareholders residing in England. But, very fortunately, thanks to a decision of the ex-Minister of Finance, Dr Eleodoro Lobos, this omission has been remedied, and it has been decreed that all financial establishments must in future supply the Ministry of Finance, during the first days of each month, with an explanatory balance-sheet giving details of their transactions. This information is made public, so that not only the Government, but anyone devoting himself to the study of commercial or financial affairs, may obtain an exact knowledge of the situation of the leading banks, and thence of the market, or indeed of the country in general.

All these banks work with a relatively large capital, which is mostly deposited. To understand the situation we must remember that banks are obliged, in the Argentine, to keep going by their own means, and are not allowed the resource of mobilising their turnover by rediscounting at the Bank of the Nation. The latter, indeed, is rather a competitor than a prop; since it also seeks the custom of private clients. Thus the funds at the disposal of the banks consists of their own capital and their deposit accounts—these latter varying greatly from one period to another—and they cannot benefit by the supplementary force arising from a credit at the National Bank.

This lack of fluidity as affecting their capital is doubly inconvenient; it forces the banks always to keep their cash reserves at a high level, and also prevents their finding employment for their deposited funds—at any rate in the case of accounts at sight. Without this faculty of rapid mobilisation they cannot enlarge, by operations of short

BANK	Founded in	Capital		Reserve Funds	Last Dividend
		Subscribed	Deposited		
London and River Plate Bank	1862	£2,000,000	£1,200,000	£1,200,000	20 %
London and Brazilian Bank	1862	2,000,000	1,000,000	1,000,000	15 %
British Bank of South America	1863	1,300,000	650,000	600,000	13 %
Italia y Rio de la Plata	1872	1,200,000	1,200,000	242,600	10 %
Español del Río de la Plata	1886	4,400,000	3,346,671	738,848	12 %
Francès del Río de la Plata	1886	2,400,000	2,350,340	140,562	9 %
Nuevo Banco Italiano	1887	264,000	264,000	103,400	15 %
Popular Argentino	1887	429,836	427,251	197,296	11 %
Anglo-South-American Bank	1888	2,500,000	1,250,000	750,000	9 %
Banco de la Nacion Argentina	1891	9,697,600	9,697,600	5,332,319	...
„ Aleman Transatlantico	1893	1,000,000	880,000	159,232	9 %
„ Popular Italiano	1899	110,176	79,752	3,696	...
„ del Río de la Plata	1902	88,000	87,340	6,864	10 %
„ de Credito Argentino	1904	247,280	148,783	...	...
„ de la Provincia de Buenos-Ayres	1906	1,760,000	1,760,000	89,320	10 %
„ de Galicia Buenos-Ayres	1905	264,000	264,000	2,438	4 %
Ernesto Tornquist & Co. Ltd.	1874	1,500,000	1,500,000	230,263	10 %

duration, the sums which they receive in deposit, and consequently cannot allow any appreciable interest on that portion of their capital. Some banks are at present paying 1 per cent. on current accounts; others, and notably the National Bank, allow their depositors no interest. For deposit accounts at three months the interest is usually $3\frac{1}{2}$ per cent.

As for the rates of discount, these have fallen considerably in the last few years; partly on account of the increasing competition between the various financial groups, and partly on account of the abundance of capital after several years of good harvests. After standing for a long time at 7 and 8 per cent., the average rate for first signatures tends nowadays to settle at 6 per cent.

This is a fact which may surprise those who believe that the monetary situation of a country is always affected by the premium on gold, but we shall see, in the chapter on finance, that there is, as a matter of fact, an influx of gold into the country, and that its movable resources have never been more abundant. The circulation of notes is now guaranteed by a cash reserve of more than 65 per cent.

The banks receive deposits at sight, at thirty, sixty, ninety, and one hundred and eighty days. They also receive deposits on the "savings-bank" system: that is they pay $3\frac{1}{2}$ or 4 per cent. upon deposits not exceeding 5000 to 10,000 piastres in paper money, or 3000 to 5000 in gold (according to the particular bank)—that is, £440 to £880 in notes, £600 to £1000 in gold—on condition that if the money is withdrawn under sixty days no interest will be allowed. After the lapse of sixty days the money may be withdrawn at the will of the depositor, and the interest is added since the day of deposit. Small savings deposited on this system attain to considerable proportions, and the public is becoming more and more familiarised with business of this kind.

One item that differs very sensibly from European usage is the rate of interest charged on current debit accounts. As the Argentine has no law regulating this rate, there have been times, happily now past by, when this rate has been as

high as 10 and 12 per cent. Of late years the Government has paid, as a maximum, 6 to 7 per cent. and that in moments of disequilibrium, when international complications were feared, and the bank rates had risen in England and elsewhere.

For private individuals conditions are also easier, on account of competition, and 7 per cent. has become practically the average rate. In certain banks the rate on debit accounts has even fallen as low as 6 per cent.

The following table indicates the movements of the principal accounts, during the years 1906-1908, in the case of the various banks which publish their balance-sheets, in the Argentine.

On an international market like that of Buenos Ayres exchange operations are naturally most attractive. Since the suppression of the gold premium, which has reduced the risks to a barely sensible amount, these operations no longer retain their old speculative character; but, on the other hand, the profits to be drawn from operations of this kind have greatly diminished, so that business has gained only in safety and extent. We may here recall the fact that speculations in gold, which amounted to 1,234,000,000 piastres paper (£108,592,000) in the year 1899, had fallen to 211,000 piastres in 1904, and have now entirely ceased.

Moreover, in order still further to avoid all risks, such business is now done by means of cable transfers, instead of by cheques at one month from date as formerly; thus avoiding as far as possible any variation in the rate of exchange. It is chiefly during the period of exportation that these drawing transactions become of great importance.

Exchange business is transacted on a gold basis; that is, on the basis of the gold piastre, which is equivalent to a dollar, or to 5 francs of French money, or 4s. of English; as for settlements, they are made indifferently in gold or paper, on the basis of 44 centavos, or .44 of a piastre in gold, for one piastre in paper.

Formerly the rate of exchange used to vary very perceptibly with the seasons. The banks used to buy during the export season, which for grain and wool lasts from December to March, and consequently profited by the

BANKS	MILLIONS STERLING					
	Deposited		Discounted		Cash Reserves	
	Gold	Paper*	Gold	Paper*	Gold	Paper*
National Argentine ..	.54	14.773	.26	15.004	1.86	4.611
Spanish of the Rio de la Plata ..	.52	10.076	.58	8.239	.26	2.84
French ..	.88	4.206	1.16	4.110	.62	1.117
Italian ..	.38	6.204	.8	4.259	.42	1.645
New Italian ..	.08	1.804	.16	.950	.02	.361
Popular Argentine ..	.004	.801	.01	.809	.02	.255
Province of Buenos Ayres ..	.18	4.593	.042	3.591	.04	1.183
German Transatlantic ..	.26	2.367	.94	2.552	.34	.533
Anglo-South-American ..						
British ..	.28	2.836	.76	2.561	.30	.774
German ..	.02	.139	.06	.325	.06	.289
London and Brazilian ..	.16	6.683	.53	.945	.12	.185
London and the Rio de la Plata ..	1.46	11.906	1.64	7.629	.96	3.602
National Argentine ..	.98	16.940	.4	18.832	3.612	4.840
Spanish of the Rio de la Plata ..	.32	9.880	.38	8.553	.32	3.476
French ..	1.04	3.819	1.23	3.845	.78	1.179
Italian ..	.36	6.126	.74	4.681	.52	1.320
New Italian ..	.1	1.988	2.4	1.601	.036	.493
Popular Argentine ..	.04	.695	.0004	1.188	.03	.325
Province of Buenos Ayres ..	.38	4.919	.18	4.514	.22	1.232
German Transatlantic ..	.28	2.464	.96	2.424	.32	.693
Anglo-South-American ..	.16	.730	.42	2.173	.04	.303
British ..	.3	2.339	.76	2.503	.6	.743
German ..	.22	.264	.24	.563	.24	.660
London and Brazilian ..	.12	.739	.54	.651	.08	.211
London and Rio de la Plata ..	1.4	10.665	1.2	6.713	1.00	3.634
National Argentine ..	1.06	20.501	.4	21.433	4.54	5.944
Spanish of the Rio de la Plata ..	.44	11.077	.38	11.044	.38	3.687
French ..	1.18	4.013	1.02	4.919	.68	.880
Italian ..	.36	6.6	.8	4.699	.58	1.302
New Italian ..	.08	2.094	.16	1.874	.01	.415
Popular Argentine ..	.016	.809	.0002	1.443	.02	.273
Province of Buenos Ayres ..	.4	57.112	.12	5.738	.014	1.381
German Transatlantic ..	.236	3.053	.88	.254	.3.6	.906
Anglo-South American ..	.14	.607	.16	1.461	.08	.255
British ..	.18	3.247	.46	2.606	.52	.739
German ..	.16	.264	.28	.756	.06	.141
London and Brazilian ..	.12	.713	.44	.774	.14	.255
London and Rio de la Plata ..	1.22	10.677	.98	7.119	1.9	3.669

* The amounts here given are, of course, the actual, not the face values, of the notes.

abundance of the market to discuss the price. They then sold to import houses during the slack season, sometimes making a profit of 6 to 10 centimes. Now competition has greatly reduced these margins, which scarcely vary at all, in a normal season, except to the extent of an insignificant fraction.

Again, the sales of money are now extended over a far longer period than before, as the export season itself has been extended by new products, such as maize, chilled and frozen meats, etc., which do not necessarily find their outlet at the same time as the rest of the harvest. Thus the banks have no longer any incentive to hoard reserves of money, as they are no longer certain of selling them a few months later.

All these conditions here enumerated are of course subject to certain small variations, according to the kind of trade or industry. The large landowner, the grazier, the farmer, the cattle-breeder, who has no money at his disposal but that coming from the sale of his products, can only procure credit, no matter what his wealth may be in land, at a rate far higher than that which is demanded of the large commercial houses of Buenos Ayres. But as we have especially attempted to demonstrate, the Argentine banks are to-day splendidly equipped with capital, so organised as to assist commerce by services of many kinds, and, finally, their charges have been abated, by the action of competition, to rates which one would hardly expect to find in practice in a new country.*

As the latest sign of progress we may mention the establishment of the Clearing-House, which commenced operations in 1893, upon the model of the London Clearing-House, under the able management of the under-manager of the Bank of London and the Rio de la Plata, Mr Hogg. This institution, as its name indicates, serves to strike the balances of the sums which the various banks may owe one another, the balances only being actually paid over. The total sum represented by the operations of the Clearing-House in 1908 was over £352,000,000. This figure includes

* The deposits in the Argentine banks at present amount to nearly £80,000,000.

the transactions of the principal banks of Buenos Ayres, with the exception of the National Bank, which does not make use of the Clearing-House.

Between 1893 and 1899 the business done at the Clearing-House underwent a notable and continual increase, and in 1899 amounted to more than £350,000,000. Since that time its operations temporarily decreased in value, owing to the suppression of the gold premium, which put an end to exchange speculations, which formerly kept the Clearing-House busy; so that in 1903 and 1904 the total amount of the operations was barely £264,000. Since 1904, however, these figures have gradually increased, and in 1907 and 1908 they once more exceeded £350,000,000. To-day the business is purely commercial, rendering any exact comparison with the times when speculation played the principal part extremely difficult. But if we could subtract this latter element we should certainly find that the compensations based on commercial operations have greatly increased, since the figures of 1899, although less by those representing speculative transactions, have not appreciably diminished.

The Bank of the Nation.—To complete this account of the banks of Buenos Ayres and their operations, we must give an account of the working of the most important of them all: the *Banco del Nacion*. This bank is of especial interest, on account of its relations with the Argentine Government, which guarantees all its liabilities.

The Bank of the Nation came to birth at an extremely critical moment in the history of Argentine credit and finance. In 1890, after the double political and financial crisis which was then affecting the country, as a consequence of the errors and abuses committed by the Governments, at a time when all the official credit establishments in the country lay moribund, disorganised, and discredited, the Government of Signor Pellegrini, called in to inherit the confusion of that which had just fallen, found itself faced with terrific problems. It attempted to solve the banking problem by founding a new institution, to which it assigned a capital of 50,000,000 of piastres—£4,400,000—the shares to be offered for public subscription. To the subscribers it promised a certain intervention in the

administration of the bank, at the same time reserving to the State the right of appointing the president, just as the French Government appoints the president of the Bank of France. In order as far as possible to guarantee the shareholders and the public against the errors and abuses which had formerly been so disastrous, it established certain restrictive rules in the charter of the new establishment.

At another time there was much discussion as to whether the Government of Signor Pellegrini, whose patriotic intentions no one doubted, would not have done better to rescue the old *National Bank*, which was tottering amid the ruins of the crisis, and whose assets, administered by the new institution, might have given better results than did liquidation, thus saving the State much expense; but this question is no longer of immediate interest.

As was only to be feared, the public, after the spectacle of such striking examples of the lamentable end to which official banks are liable in countries formed by the chances of immigration, and devoid of established traditions: wherein there exists no sanction for the suppression of undoubted abuses: the public, we shall see, regarded the new institution with mistrust, and abstained from buying shares. The Government, disappointed in its attempt, was compelled to replace the system of public subscription by an issue of notes, which explains why a purely official bank was created, instead of the mixed bank which had been proposed.

Realising that the success of a bank depends far more upon the confidence with which it inspires the public than upon its organic charter, Signor Pellegrini's Government, together with those that followed it, took care to place at the head of the *Banco del Nacion* only men who were capable, by their good judgment, their technical competence in banking business, their social position, and their knowledge of the business world, of giving prestige to the establishment, and surrounding it with the atmosphere of respect and confidence which was necessary to its success. Thus in spite of its official origin the bank was able to find support in public opinion, and to render important services to industry and commerce.

A study of the accounts of this establishment, during the

years 1904-1908, reveals a steady and prosperous progress, which has incontestably placed the Bank of the Nation at the head of all similar institutions.

A glance at the following table will prove this. It contains the balances of the three principal accounts, upon the 31st of December of the five years from 1904 to 1908 inclusive.

Year.		Bills in Hand.	Overdrafts in Current Accounts.	Deposits.
1904	... ..	£8,486,326	£14,384	£12,561,969
1905	... ..	11,842,611	2,589,167	15,501,340
1906	... ..	13,364,585	1,907,818	15,163,974
1907	... ..	16,502,621	2,731,314	18,008,501
1908	... ..	19,049,798	2,897,008	20,713,375

We see from these figures that in five years the business done has increased by more than 10½ millions of pounds; the overdrafts in current accounts by nearly £300,000 (in four years, 1905-1908), and the deposits by more than £8,000,000.

The Bank of the Nation has one hundred and ten branch establishments scattered all over the Argentine, and their number is continually increasing. Here are the figures relating to the three principal accounts in these branch establishments during the same period:—

Year.		Bills in Hand.	Overdrafts on Current Accounts.	Deposits.
1904	... ..	£5,111,481	£3,744	£5,187,982
1905	... ..	6,987,847	349,427	6,842,559
1906	... ..	8,557,900	570,350	7,707,001
1907	... ..	9,848,713	860,899	8,433,003
1908	... ..	11,196,690	744,119	10,210,650

We find here, among the branch establishments, an increase of over £6,000,000 in the bills in hand; nearly £740,000 in the overdrafts on current accounts; and over £5,000,000 on the deposits.

These exceedingly satisfactory results have been obtained by the National Bank by means of a nominal capital of £9,680,000. We use the phrase "nominal capital" with intention, for although this sum figures on the balance-sheets of the bank, we must remember that in this capital are included State bonds, which would have furnished, had they been negotiated, an available sum of £3,212,000 in paper-money, and that the net profits of the year 1908 are also

included, amounting to £644,036 in paper, which by law must go to increase the "Capital and Reserve Funds." The two accounts, after the deduction of the sums accruing to them as profit, amount respectively to £9,697,946 in paper-money and £1,303,248 in gold. It follows from this that if the *Banco del Nacion*, instead of being an official institution, were an ordinary bank, it would have been able to pay its shareholders a dividend of 10 per cent. upon its paid-up shares.

The data we have just given prove abundantly that the Bank of the Nation has been directed by a hand as firm as it is prudent, and there is every reason to suppose that it will continue in the future to serve public and private interests as well as it does to-day. The forecast we predicted in the first edition of this book will have proved mistaken; a forecast based upon the authoritative opinion of an eminent Argentine statesman, who affirmed that the official banks "bore within them the germs of the moral and financial ruin of the country." He even added that one should never "incorporate a bank with the political administration of a State, because sooner or later it will be used as a political weapon."

We must here pay our respects to the memory of Dr Ramon Santamarina, a former president of the Administrative Council of this establishment, whose premature death was a great loss to the bank and to the country. It is, indeed, to his intelligent and circumspect management of affairs that we owe a great measure of the happy results obtained.

The Bank of the Province of Buenos Ayres.—There is in the Argentine another important financial house: the *Banco de la Provincia de Buenos-Aires*, which has lately re-arisen from its ashes, by the aid of the *Banco del Comercio Hispano-Americano*. This also was a victim of all kinds of abuses, committed to its detriment, by the administrations which successively directed it.

The bank was reorganised in June 1906, with a capital of £1,760,000, of which sum half was furnished by the Government of the Province and half by the shareholders, with the proviso that this capital might be increased to

£4,400,000, which was done at the end of 1908. According to the business done by this bank from 1906 up to the present time, we may predict for it a great future, provided that its presidents, learning from the past, guard it resolutely from the influence of political struggles and the demoralising factions from which it has suffered in the past. The new establishment enjoys all the prerogatives, exemptions and privileges which were accorded to the old bank; it is the obligatory receptacle in which are deposited, gratuitously, the funds of the provincial administrations and the courts.

The most delicate point in this conjunction, namely, the manner in which the administration of the bank should be conducted, has been so determined as to assure the preponderance of the private interests of the shareholders of the bank over the official interests of the Government. The administration of the bank is confided to a council, composed of a president appointed by the Government of the Province of Buenos Ayres, and twelve directors, four of whom are nominated by the Government and eight by the private shareholders; an arrangement which constitutes an excellent guarantee of proper management.

From the balance-sheets of the last three years, and the figures contained in the reports of the directing board, or Council of Administration, we may judge the activity displayed by this bank, and the progress realised since its re-establishment.

Here, for example, are the amounts of the deposit accounts as taken upon the 31st of December of each year, from 1906 to 1908 inclusive, as well as the bills in hand and the overdrafts on current accounts.

Year.		Deposits.		Bills in Hand.	Overdrafts on Current Accounts.
		Paper.*	Gold.		
1906	...	£4,610,309	£179,431	£3,419,809	£467,342
1907	...	4,920,561	396,108	3,953,903	565,670
1908	...	5,716,441	409,690	4,785,044	477,310

The extensive business done by this bank, which is evident from the preceding figures, has produced considerable profits, which amounted to £109,298 in 1906; £220,551 in 1907; and £246,884 in 1908.

* Actual value in gold.

In the latter year the net profits reached an average of 14·02 per cent. of the total capital. This flourishing state of affairs allowed of the payment to the shareholders of a dividend of 9·5 per cent. in 1907 and 10 per cent. in 1908, without prejudice to the reserve funds, which amount to £73,920.

Money-lending or Mortgage Banks (*Banques Hypothécaires*). There are two great official institutions of this kind in the Argentine: the *Mortgage Bank National* is progressing in a normal manner; the other, the *Mortgage Bank of the Province of Buenos Ayres*, is painfully achieving the process of liquidation.

We must explain that this institution, which worked for a number of years with average regularity, collapsed violently in 1890, on account of the scandalous abuses committed by the management in the matter of loans, and the pernicious introduction of electoral politics into the conduct of business. This is one of the most lamentable pages of the administrative and financial history of the Argentine during the last few years.

After numerous efforts had been made at various times with a view to making an arrangement between the bank and its creditors by means of an exchange of its bonds of mortgage for new bonds of the *Rente Provinciale*, a satisfactory agreement was at length arranged, which put an end to the irregular situation of the bank, in a manner as advantageous for the creditors as for the Province.

According to the report drawn up by the representative of the Government, the liabilities of the bank amounted, on 30th June 1906, to £19,725,636; and to set against this colossal debt the bank possessed the assets, largely precarious, represented by 503 loans on mortgage, of which the principal amounted to £1,967,704, while unpaid or overdue interest accounted for £6,568,440; or a nominal total of £8,536,140.

The assets also comprised certain other items, amounting to a total of £2,186,184.

Some of these assets had a real value and could be considered as capable of realisation. Among these were: the money in the bank, the bank premises, the mortgages, and the special accounts with the Provincial Government; these items constituted the best class of assets. The re-

maining assets were more precarious, and their investigation gave rise to serious criticisms.

Two classes of assets, for example, which were apparently of considerable importance—those relating to hypothecary credit and to personal shares—were far from representing the value which was shown on the balance-sheet.

Taking into account the probabilities of the realisation of certain classes of assets, in case of need, a liability of £19,725,636 was opposed by assets equivalent to £6,242,039, leaving a deficit of £13,583,595. In other words, the assets represented only 31 per cent. of the liabilities.

The Government's representative, having analysed the effective revenue at the disposal of the Province, and allowing for the probable progress by which it might benefit in the immediate future, declared that the Public Treasury could not put aside more than £308,000 for the purpose of guaranteeing the dividends on the shares of the Bank; but that this sum would probably be increased by £44,000 during the next five years, and by £48,400 at the end of ten years; thus assuring the creditors of an interest of $3\frac{1}{2}$ per cent., and a proportional amortisation of $\frac{1}{2}$ per cent. An arrangement on this basis was proposed to the creditors of the Bank at a general meeting, held at la Plata in November 1906, and was accepted.

We must add that at the present time the Provincial Government is considering a scheme designed to infuse new life into the *Mortgage Bank*. This system consists of founding a limited company in which both public and private interests would be represented; a state of affairs very like that already in existence, and yielding excellent results, in the case of the Bank of the Province of Buenos Ayres.

The great official establishment for loans on mortgage in the Argentine is the *Banco Hipotecario Nacional*. This bank grants loans upon real estate in the capital, provinces, and national territories. It issues cedulas which bear an interest of 5 to 6 per cent., with an amortisation rate of 1 to 4 per cent., which are quoted at about par on the market, so that the holder, after the deduction of expenses and commissions, obtains a satisfactory interest.

The value of cédulas in circulation at the end of 1908 amounted to £11,871,108 in paper (actual value) and £1,876,530 in gold, respectively.

In addition to these official establishments, there are various private companies, founded by means of foreign capital, which issue loans on real estate in the capital of the Republic and on land in some of the Provinces.

According to our information, these companies employ a capital of nearly £15,000,000, divided as follows:

Argentine Railway Loan Co., Ltd.	...	...	£827,600
River Plate Trust Loan and Agency Co.	...	...	2,705,422
Société de Crédit Foncier de Santa Fé	...	...	511,120
Mortgage Co. of the River Plate	...	...	1,997,717
River Plate and Gal. Investment Trust Co.	...	...	504,000
Dutch Mortgage Trust of the Rio de la Plata	...	...	286,194
Argentine Mortgage and Agricultural Co.	...	...	80,000
The Standard	...	...	541,488
Crédit Foncier Argentine	...	...	3,016,340
Compagnie Pastorale Belge Sud.-Americaine	...	...	1,350,102
Société Hypothécaire Belge-Argentine	...	...	1,583,130
Banque Hypothécaire Franco-Argentine	...	...	1,487,160
Société Rurale de Bahia Blanca	...	...	3,960
			<hr/>
			£14,894,233

High as these figures are, however, they represent only a portion of the foreign capital employed in this class of transactions, for considerable sums are advanced by private persons who wish to obtain the high interest obtainable.

These companies lend only gold, that they may escape the fluctuations of the paper-money market, and usually limit their operations to dealing with properties in the capital or in the Province of Buenos Ayres, doing business with the rest of the country only in a very limited degree. Although Argentine legislation is extremely advanced in the matter of loans and mortgages, the lender fears, in the case of certain provinces, to encounter difficulties in practice, or delays of legal procedure in the case of foreclosing. The interest on mortgages, which during the year 1908 was maintained at about 9 per cent., is to-day showing a tendency to fall, on account of the abundance of money in the Buenos Ayres market; the rate is now as low as 8 per cent.

It is in the capital of the Argentine that mortgage operations are most active. During the decade 1889-1908 the amount of loans upon property reached the sum of £37,241,000. This amount was lent upon 40,996 properties; and of this total £7,603,000 was lent in 1908 alone. The mortgages effected upon rural properties, throughout the entire Republic, for the years 1903 to 1907 inclusive, amounted to £37,920,000, and the mortgaged property amounted to nearly 80,000,000 acres. In this total the Province of Buenos Ayres was represented by £16,880,000; that of Santa Fé by £3,240,000; that of Córdoba by £6,240,000.

The Argentine Republic possesses one of the most perfect systems of mortgage in existence among modern nations. To prove this statement we need only explain that the Argentine laws do not recognise secret mortgages; nor do they admit any privileges in favour of married women or minors in respect of special mortgages. Neither does such a thing exist as a general mortgage, nor are there any privileges taking precedence over the right of the mortgagee.

The mortgage, like every action which affects or modifies the right of the proprietor over immovable property, must be signed before a notary and registered by the Conservator of Mortgages. Before drawing up the deed, the notary must, as in the case of sales, demand a certificate stating whether the property is or is not free from charges. Although the right of the proprietor is perfect as to possession, the law tends to give property a certain degree of mobility; thus for this reason the term of a sale with power of redemption is three years, the term of a lease ten years, and that of the registration of a mortgage ten years; but all these terms may be renewed upon expiration. The term of ten years in the case of mortgages does not affect the *Banco Hipotecario Nacional*, nor the *Banque Hypothécaire de Buenos Ayres*, nor the *Banque Hypothécaire de la Capitale*, in virtue of the special laws which created these institutions.

The Bourse or Exchange.—The first Commercial Exchange or Bourse, or let us rather say the first institution to fulfil the functions of an exchange or Bourse, for we cannot give that name to the market which formerly existed in Buenos

Ayres, was inaugurated in 1810 under the name of the Chamber of Commerce—*Sala de Comercio*. It was composed exclusively of members of the English colony, and offered them, besides the usual advantages of such establishments, the attraction of a well-furnished library.

The documents available do not tell us how long this institution lasted, nor whether at a later period it opened its doors to the Argentine element nor whether, being finally transformed, it served as a basis for the organisation of the exchange as it is to-day. The only thing certain is that in July 1834 the first members of the association met in the Via San Martin, there to establish the Bourse, of which the inauguration took place on the 1st of December following.

Before this date there was a financial group known as the "Sociedad Particular de Corredores," which was known as the *Camuati*, and which busied itself with mercantile transactions.

The Bourse retained its original premises until the year 1862, when it was installed in another building in the same street, at present occupied by the Caisse de Conversion, or Bank of Exchange.

Some years later, the premises being too small, it was proposed to build other and far larger premises, sufficient to meet the ever-increasing demands of the institution. In 1881 an extraordinary general meeting was held, with a view to forming a company to undertake the construction of premises to house the "Sociedad Bolsa de Comercio." But the company was not formed until 1883, when it acquired the site on which the Bourse now stands; and its official inauguration took place two years later.

Since then the Commercial Exchange has enjoyed a period of continued prosperity; it is to-day the first commercial centre of Latin America. It exercises a great influence over the commercial and economic life of the Republic. It is the sole establishment of its kind, having judicial powers, open to all mercantile transactions, and establishing, under the stress of supply and demand, the prices of the products of labour or commerce. Having the power of fixing the value of merchandise by quotations of

paper-money, it is, more than any other institution, liable to exceed its functions; but it bears within itself, in its admirable organisation, the means of repairing its own errors and of remaining the faithful regulator of prices and values.

The most eloquent commentary upon the importance of the operations effected by the *Bourse de Commerce* is the simple enumeration of their value at various periods, for we then realise the enormous development which they have achieved in a period relatively short. In 1886 the total of the business done was \$173,000,000 paper, £34,600,000 face value; in 1887 it was \$254,000,000 (£50,800,000); in 1888 \$432,000,000 (£86,400,000); in 1889 \$469,000,000 (£93,800,000). The total value of all business effected, liquidated or not, cash or credit, during the years 1890 and 1891, amounted to \$18,000,000,000 (£1,584,000,000) and \$7,000,000,000 (£616,000,000), respectively.*

These figures, in their simplicity, cover the history of an interesting period of the financial life of the country. The wave of speculation which turned all men's heads began to rise as early as 1887, and in 1891 was at its greatest height; it then crumbled into foam, having shattered the most deeply-rooted of banking houses, compromised the national credit, changed brilliant illusions into melancholy realities, and sown desolation and ruin in many a home. After the catastrophe the total value of business done rapidly fell, and we see it falling violently from one year to another—from the \$18,000,000,000 of 1890 through the \$3,376,000,000 of 1895, to the \$835,000,000 of 1900; a year which experienced a condition of affairs which was destined to produce a beneficent influence upon the economic life of the country.

In this total of \$835,000,000 of paper-money we find that transactions in gold amounted to \$774,000,000 paper money, corresponding to \$66,800,000 of gold negotiated; while in 1899, the whole business done in the Bourse still amounted to the respectable sum of \$1,295,000,000 paper, of which \$1,234,000,000 represented operations in gold. From one

* The values before 1900 are face values, as the actual value of the piastre note fluctuated. They must not be taken as actual values any more than in the case of Indian rupees.—[TRANS.]

year to another the total sum of the business transacted in the Bourse had diminished by \$460,000,000 (paper).

The principal cause of this notable decrease was the "law of monetary conversion."

This law, which has been in force since 1890, fixed the value of 44 centavos, or \$·44 gold, for the future conversion of paper-money, and enacted that the Caisse de Conversion should receive the gold and deliver paper, and *vice versa*, at this same rate: a rate equivalent to 227·27 per cent. The effect of this reform was thus, if not to destroy, at least very largely to limit unbridled speculation, which made itself especially felt in the value of the paper piastre.

Speculation in gold being suppressed, the volume of business transacted on the Bourse de Commerce of Buenos Ayres grew gradually less and less, falling finally, in 1904, to \$37,312,000 paper, of which \$19,968 stood for gold.

After 1904 the total sum of these operations was still further reduced, the figures for 1908 being incredibly low. Thus the total, which in 1905 had attained £45,400,000, rose to £57,800,000 in 1906, fell in 1907 to £16,880,000, and in 1908 to £12,560,000. To-day the activity of speculators is concentrated upon operations in mortgage bonds and the shares of various companies; each class of operations amounting to some £5,000,000. These figures show that the Bourse de Commerce loses from day to day some part of its importance as the regulating centre of mercantile transactions; but it would be an error to measure the economic vitality of the Republic by the amount of business effected on the Bourse, since an examination of the situation shows us that the Argentine has never known a period of more obvious prosperity.

Having explained the new phase upon which the Buenos Ayres Bourse has entered, we must now consider its organisation and its usages, and the regulations under which it operates.

In the first place we must remark that the Bourse is not an official institution, but a private establishment, founded and supported by a limited liability company, the "Bolso de Comercio," which is recognised as a judicial body.

In contrast to other Exchanges, and that of New York in particular, the number of shareholders is unlimited, and varies from time to time. In 1886 there were 2959; in 1891, 4901; in May 1905, 3709. To become a member of the Bourse one must be presented by two shareholders, admitted by the Council Chamber or Committee (*Chambre Syndicate*), and must pay a moderate entrance fee, as well as an annual subscription.

According to its rules, the object of the Bourse de Commerce is to "offer a place of meeting to these members, where they may discuss and effect all manner of lawful business; and to facilitate and negotiate all commercial operations by giving them security and legality." It also undertakes to represent commerce and production in general before the authorities of the country, or before private undertakings; it supports petitions relative to their interests, in order that laws about to be proposed, or those which are being adopted, shall be equitable and shall favour the development of commercial transactions. Its object is both to ensure the unity of commercial usages, and in case of need to take the initiative in all questions of economics which may affect commerce in general.

The management of the Bourse is effected by the Council Chamber—the *Chambre Syndical de la Bourse*, which is entrusted with the general and official representation of the institution. It is this authority which permits or refuses the official quotation of all stocks, shares, loans, etc., issued according to the laws of the country of their origin and by legally constituted bodies.

The functions of the stockbroker can only be fulfilled by persons previously authorised by the Council Chamber, after they have accomplished certain formalities, and have proved whether they have attained their legal majority, have experience of business, and have enjoyed a good reputation, all of which must be guaranteed by three men of business of known responsibility. The number of such brokers is not limited, and may be increased or decreased according to circumstances. In 1905, for instance, their number was 385. They are not obliged to give security nor to make any deposit as guarantee before practising; they have merely to pay a small monthly subscription.

The regulations of the Bourse contain severe provisions against brokers who infringe any of the numerous prohibitions affecting them; such as accepting orders from clients whose identity has not been proved; from persons known to be insolvent, or from incapable persons; or acting as intermediary in negotiations where there is reason to suspect that the parties involved are not proceeding seriously. Brokers who infringe these rules or others—who do not, for example, meet their engagements—are suspended by the Council Chamber of the Exchange.

All operations must be declared in an audible voice by the stockbroker to the recorder (annotator), in order that the latter may inscribe them upon the blackboard. The vendor and the buyer must then exchange memoranda, in order that the transaction shall be definitely confirmed and made valid. All transactions effected on exchange* during official hours are copied, with the prices, from the blackboard into the Journal of Sales; these latter being also published in the *Boletín de la Bolsa de Comercio*; or, as we should say, the Stock Exchange Bulletin. The settlement of all transactions concluded is effected through the Council Chamber, with the aid of the *Bureau de Liquidation*, or Settlement Office, under the supervision of an official liquidator, appointed at a general meeting of the brokers, who charges a percentage on the settlements which he effects.†

Such are the principal rules of the organic charter which regulates the operations of the Stock Exchange of Buenos Ayres, and such is its method of operation. Let us now examine the total amount of its operations during the period 1895-1908, and how they may be analysed:—

Year.			Piastres (Paper).	Pounds (Sterling).
1895	...	...	1,244,602,058	—
1896	...	...	1,383,472,329	—
1897	...	...	1,306,531,655	—
1898	...	...	1,219,304,846	—
Carry forward,			5,153,910,888	—

* Literally, "at the basket."—[TRANS.]

† The brokerage is $\frac{1}{4}$ per cent. on the sale or purchase of bonds, shares, debentures, etc., and is charged on the face (or nominal) value of the amount changing hands. A charge of $\frac{1}{2}$ per cent. is also made on all operations on Exchange.

Year.		Piastres (Paper).	Pounds (Sterling).
	Brought forward,	5,153,910,888	
1899	... ..	1,295,304,846	—
1900	... ..	834,982,214	£73,478,434*
1901	... ..	1,003,709,984	88,326,476
1902	... ..	841,627,532	74,063,222
1903	... ..	383,905,622	33,783,694
1904	... ..	423,957,361	37,308,227
1905	... ..	515,607,316	45,373,454
1906	... ..	655,624,566	57,694,961
1907	... ..	192,130,565	16,907,489
1908	... ..	143,466,502	12,625,052
Total for 14 years ...		<u>\$11,444,377,390</u>	(9 Years), <u>£439,561,009</u>

Of this total an amount of 8724 millions of piastres, or 76·2 per cent., applies to metallic operations, which kept speculation alive until the monetary law of 1899 once and for all arrested the varying values of paper money. If this law had had no other effect, this result alone would have justified it as wholly beneficial to the interests of the nation.

In the quotations of the above period mortgage bonds hold the second place; they represent about 5 per cent.

Being dominated by the spirit of speculation, which expended itself principally, indeed almost exclusively, upon monetary transactions, the Bourse had no time to devote itself to more legitimate business. Thus the public funds represented only some 3 per cent. of this total; then came shares and debentures of various companies; and last of all banking shares, the amount of these being insignificant.

The nominal value of all the securities which were quoted on the Buenos Ayres Bourse in 1907 amounted to \$554,791,932 paper and \$127,763,525 gold, or an actual total of £74,374,395, and an analysis gives the following results:—

		Dollars (Paper).	Dollars (Gold).
Public funds and stocks ...	...	157,025,295	35,000,000
National Mortgage Cédulas	...	129,383,100	11,443,600
Provincial „ „	...	129,745,642	—
Limited Companies: shares	...	136,657,520	78,416,320
Debentures and certificates	...	1,980,375	2,903,605
Totals	...	<u>\$554,791,932</u>	<u>\$127,763,525</u>

These two totals together are equal to a sum of £74,374,395.

* These values are given only from 1900, when the value of the piastre was fixed.

In the first edition of this book we gave a summary of the nominal value of all the stocks quoted on the Buenos Ayres Stock Exchange in 1904; the sum amounted to 462 millions paper and 38 millions gold, or a total of £52,256,000; so that in three years these figures had increased by 93 millions paper and 70 millions gold, or over £22,000,000.

It is permissible to hope that in the course of time the Buenos Ayres Exchange will attain a far greater development, and that it will even exercise some steadying influence on the prices of the public funds. To-day their real market is in London, Paris, or Berlin, so that the credit of the country is affected by the disturbing events of European markets, while the Buenos Ayres market is devoid of any compensating effect.

However, it may be observed that when a country begins to grow rich and to have more assets at its disposal, the public funds placed abroad show a tendency towards repatriation. We have seen this in the case of Italy and Austria, which had an important foreign debt in France, and have considerably reduced it during these last ten years of economic progress.

It will certainly be the same in the case of the Argentine when, thanks to a series of good harvests, its available or fluid assets have increased beyond what is absolutely necessary for the development of agriculture. Investments will be made not only in land or in live stock, but money will be invested in stocks and shares as well, and notably in the Government stock of the country.

As a symptom of this tendency, we may mention that interest on the foreign debt, the coupons for which have hitherto been payable abroad only, is now payable in the Argentine as well, in order to facilitate the purchase of this stock in the Republic as a staple investment. The internal debt is also the object of more extensive operations, now that the seventeen loans which constituted the old debt have been unified, and now that a special call is to be made upon the internal credit of the country with a view to undertaking vast public works. To enlarge the market for this Government stock the authorities have just decided that its coupons shall be payable on the principal foreign markets.

Finally, in the course of time the market for industrial stock, bank stock, and railway shares will gradually become less restricted, in proportion as the public fortune becomes more extensively subdivided, instead of being concentrated, as it is at present, in a comparatively small number of hands. The only thing that may compromise this future is the excessive speculation which we find, unhappily only too often, in a country where gambling is a dominant instinct. This excess, with its natural sequelæ in the form of financial crises, might end by driving all serious clients from the Bourse, and in destroying the excellent elements which Buenos Ayres possesses for the creation of an important financial market.

Limited Companies.—In the vast progressive movement which increase in force yearly throughout the Argentine Republic, the Bourse of Buenos Ayres has yet another part to play: that is, to facilitate the formation of collectivities of capital under the form of joint-stock companies, since the spirit of enterprise exhibits itself by preference under this form. Collective effort is to-day more and more replacing individual effort; the Argentine must therefore learn how to employ this weapon of associated capital in order to promote new undertakings, and, by popularising movable values or securities by the help of the Bourse, to raise up new resources to the country's profit.

Our study of the chief manifestations of Argentine life and its commercial machinery would thus be incomplete if we did not give some account of the public companies of the Argentine, the legal formalities demanded of them upon their formation, their mechanism, and the vicissitudes through which they have passed at various interesting periods of Argentine history.

The constitution of public companies is subjected by the Commercial Code to rigid formalities, in accordance with the most advanced principles of universal legislation upon such matters, in order to assure their proper operation as well as the interests of the shareholders.

The indispensable conditions of the formation of such companies are the following: the number of associates must not be more than ten; the capital of the venture, or its first

issue, must not be less than 20 per cent. of the total, and must be entirely paid up; the shareholders must contribute 10 per cent. of the capital actually subscribed, a sum which must be deposited in an official or private bank; the company must be constituted for a fixed term, and must be authorised by the Government, which cannot refuse its authorisation if the functions, organisation, and articles of the company are in conformity with the code, and if its object is not contrary to the public interests.

To gain the right to publish the prospectus appealing to possible shareholders, the company must also conform to the following rules: it must indicate the date of the provisional formation of the company, must mention the place where the charter of the company was drawn up and registered, and what journals have published the articles and the Governmental authorisation; it must give details of the object of the company, its capital, the number of shares, and the conditions of subscription and payment; it must explain the exceptional advantages claimed by the founders of the company, and convoke the subscribers to a general meeting, which must take place within three months, at which the company shall be definitively constituted.

The law formally forbids the founders of limited companies to reserve any sum or advantage whatever, in the form of shares, debentures, or founders' shares, in exchange for concessions gratuitously granted by the Government. It concedes them a maximum of 10 per cent. of the capital, or 10 per cent. of the realised and liquid profits during a term which must not exceed ten years.

The founders or administrators of any company are responsible, jointly and severally and without any limit, for all that has been done in the name of the company up to the time of its definitive constitution, without appeal against the latter, if it take place.

If the company be finally constituted, the expenses and the consequences of all proceedings undertaken to that end by the founders will be charged against the exclusive account of these latter, nor will they have any resort or recourse to appeal against the subscribers.

In the case of limited companies which are not legally

constituted, the founders, administrators and representatives are, conjointly and severally and without limit, required to restore any sums they may have received for shares issued, and also to pay the debts of administration and the losses that may be incurred by third parties by the failure to fulfil obligations contracted in the name of the company.

Once a limited company is constituted, its administrators contract no common or personal responsibility for the engagements of the company, but they are responsible, personally and conjointly, to the company and to third parties, for the failure of execution or the improper employment of their mandate, and also for the violation of laws, regulations, and statutes.

All companies are obliged to appoint at least once a year a censor chosen by the general meeting, who directly represents the shareholders, and who supervises the proper conduct of the company, and the accomplishment of the legal formalities which concern it.

The Commercial Code contains many other enactments which tend to ensure the correct and legal constitution, as well as the proper conduct, of limited companies: but those we have cited will suffice to show that the law-maker has striven to use the utmost foresight, with the object of guaranteeing the interests and the capital confided to such companies.

Despite this prudence and foresight, we are forced to recognise that the institution of such companies, which constitutes a powerful economic lever when they are correctly administered and established with a view to commercial and industrial utility, is at present discredited on account of the abuses committed in its name at the time of the great crisis of 1890.

The institution of limited companies is so intimately connected with the financial disasters of that period that its history is to a certain extent the history of speculation, and it has suffered all the vicissitudes of speculation.

In 1882, when Buenos Ayres was federalised and became the permanent capital of the Republic; when public tranquillity was confirmed, with the conviction that it would be long before it was disturbed; when the public expenditure

was increased, thanks to the employment of credit and the issue of paper currency; when, in short, the prospect of universal prosperity had awakened energy and initiative; there began to pass through the country a light breeze of speculation, which was soon to become a tempest; and the limited company, which until that time had existed in a modest, inconspicuous degree, quickly assumed a greater importance, with a more definite, more concrete form.

The companies floated in 1882 and in the three following years were not very numerous, and their capital was insignificant as compared with the capital of those that followed: yet a very marked impulse towards progress was already perceptible, as much in numbers as in capital. Thus the sum of 10 million piastres, the amount of the nominal capital declared by the limited companies in 1882, rose to nearly 13 millions in 1885.

But as the fever of speculation and affairs grew higher and ever higher, thanks to the aid of the credit too liberally granted by the banks, whether mortgage or money-lending banks or otherwise, and as at the same time all the paper thrown upon the market was immediately absorbed, to the great profit of those who issued it, the limited company followed the upward march, although this movement did not always correspond with the idea of progress. Thus we see with surprise that from 13 millions of piastres (paper) in 1885, the capital of the companies rises to 34 millions in 1886, to 95 millions in 1887, to 196 millions in 1888, and in 1889 to 378 millions; and in these two latter years the fever has reached the period of greatest danger.

In 1890 the economic-financial crisis, long delayed by artificial means, burst over the country with terrible force, and a revolution broke out simultaneously. Under the weight of this double disaster the banking houses tottered on their foundations, soon to fall in ruin; credit, personal or secured, vanished absolutely; the paper currency, already depreciated, fell to a still lower value; industry and commerce were arrested in their progress, and the whirligig of speculation, which had so far gone merrily but giddily round, came to an abrupt standstill. As a natural reaction, the formation of companies, which speculation had stimulated to excess,

was stricken with an almost complete paralysis; so that we see the capital of these companies, which in 1889 had risen to 378 millions of piastres, fall in 1890 to 190 millions, and finally, in 1891, to the modest sum of 13 millions.

These, rapidly denoted, are the salient lines of a sketch of the vicissitudes of speculation and the affairs of the capital during the last ten years; a picture which begins with the rosy tints of hope and illusion, and ends in the sombre colours of bankruptcy and ruin.

The branches of trade and industry which are most largely represented by the limited company form another question of interest. It is certainly very difficult to discover the true social idea which these companies pursue at flotation, for behind pompous titles which seem to express a true national progress, such as the construction of harbours, the foundation of colonies, the building or management of railways or tramways, the opening up of new districts by means of canals, etc., there lurks, only too often, a mere scheme of speculation in shares or land. Judging, however, by the actual operations effected by these companies during the course of their existence, we can class them according to the object declared at the time of flotation, and at the same time give the statistics of their capital.

The capital of all the companies floated since 1882 amounts to 950 millions of piastres (paper), or £83,600,000. Of this sum £14,320,000 was frankly intended to promote speculation in land; £13,200,000 was applied to railways (including the purchase of the railways of the Province of Buenos Ayres); £12,144,000 to insurance (a form of employing capital much in vogue at the time), and £12,056,000 to banking affairs, which in some cases were only the mask of speculations in stock and in land.

To make our sketch complete we ought to give, instead of the nominal capital declared by these companies, the capital actually paid up; as we know that it is not every company that has at its disposal the sum mentioned in its articles, but that many have to be content with the payment of one or two instalments, while others cannot even find subscribers. Knowing these data, and being cognisant of the present condition of the companies, we should then be

able to estimate the amount of loss which they have inflicted upon the country.

Unfortunately this investigation is impossible, for lack of information, and we can only state that millions of pounds of private fortunes were lost or stolen in the limited companies of the period.

After the crisis of 1890 there was, as there was bound to be, a great mental reaction; especially in matters relating to the institution of the limited company; and the latter was so discredited that for several years not a penny could be obtained for investment in undertakings of the kind.

But it was not possible that such an important element of economic progress should be entirely suppressed on account of the abuses committed in its name. Very slowly it came into favour once more; but thanks to the lessons of experience the new companies were concerned in the foundation of undertakings of genuine industrial and commercial value. Thus the companies floated in 1902, 1903, and 1904 represented a nominal capital of \$803,979,000 paper (£70,950,352 actual value), and those founded from 1905 to 1908 (inclusive) had a nominal capital of £72,573,445, which may be analysed as follows:—

Land	...	...	...	...	£1,676,959
Railways	...	...	...	...	6,059,791·7
Insurance	...	...	...	...	13,593,981·5
Banks	...	...	...	...	9,251,958·1
Industry	...	...	...	...	7,295,793·2
Commerce	...	...	...	...	6,856,762·3
Agriculture and stock-raising	...	...	...	...	7,218,579·7
Navigation	...	...	...	...	440,000·0
Colonisation and Immigration	...	...	...	...	293,996·3
Tramways...	...	...	...	...	5,113,303·1
Hygiene	...	...	...	...	564,759·5
Telephones and telegraphs	...	...	...	...	1,349,983·8
Mines	..	...	...	...	7,332,286
Mortgage Companies and Real Estate					
Companies	...	...	...	...	4,098,448·1
Gas and electric lighting	...	...	...	...	759,249
Savings Banks	...	...	...	...	667,598·8
Total					<u>£72,573,450</u>

The mere list of the above investments is enough to convince us that the day of merely speculative companies

is over, when shares were mere travesties, more or less justified, as in the years which preceded the crisis of 1890. Now speculation in land is represented by a sum of less than £1,700,000; while insurance is represented by over 13 millions, banks by more than 9 millions, industry by 7 millions, agriculture by 7 millions, and mines by about the same amount. These latter investments belong to the category of "eruptive" stock, for, like a volcanic eruption, they rise suddenly to great heights, to fall, a little later, leaving nothing but smoke and ashes.

In the matter of company formation, as in the matter of operations of the Bourse, we see that the Argentine has re-entered the normal path of progress. Under these two manifestations, which reflect the economic activity of the country, the tide of affairs continues to increase, but the spirit of speculation no longer turns it aside, no longer undermines the organisation of the nation's commerce.

PART IV

ARGENTINE FINANCE

CHAPTER I

THE ARGENTINE BUDGET

The financial situation—Continual increase of national expenditure—Great and rapid progress since 1891—Insufficiency of the means adopted to moderate this increase—The Budget Extraordinary and the Special Legislation Budget.

Causes of this increase of national expenditure—The increase of administrative requirements caused by an increasing population; this is the most natural cause, and that most easily justified—Increase of the public debt—The intervention of the State as the promoter or guarantor of important public undertakings—Exaggerated military expenses.

The total sum of national, provincial, and municipal expenses. The proportion per inhabitant—Comparison with other foreign countries in the matter of administrative expenses.

The national revenue—The revenue as organised by the Constitution, and its analysis—Indirect taxation—The customs the chief source of revenue—Direct taxation; its origin in the Argentine; its justification; its yield—Revenue of the industrial undertakings belonging to the State: railways, sewers, posts and telegraphs—The exploitation of the State lands.

Elasticity of the receipts, which follow the development and progress of the country—The accelerated increase of expenditure, and the resulting chronic deficit—Necessity of serious reforms.

THE phenomenon of an increase in the national expenditure: a phenomenon which makes itself felt under monarchies as well as under republics, in those countries which have long centuries of life behind them, as in those whose independent existence has barely begun: this phenomenon is felt in the Argentine Republic more keenly than in the older nations of Europe. Our book would present a serious lacuna if we did not, before speaking of the increase of the Argentine budgets, inquire first of all, as closely as we can in a work of information, what are the causes which have led to this continual increase in the national expenses. We must know, in short, whether this increase is due to general causes, produced by administrative necessities, and connected with the mere progress of the country, or whether on the contrary it arises from special factors, peculiar to the social and political conditions of the country, and to the

practical defects of its Government. If we examine the amounts of the Argentine budgets for a number of years, we shall see that, with a few rare exceptions, they have always increased, and at a more or less extraordinary rate. Even in the years when the country was groaning under some profound economic or financial crisis the same thing was to be observed.

Not to go back too far in our retrospective study, let us take as a point of departure the year 1891, which year is a veritable landmark in the history of the Argentine people, since it was in that year that the political and financial crisis which broke over the country attained its greatest intensity. We find that in 1891 the expenditure authorised by the national budget—not the expenditure actually effected, with which we shall deal further on—amounted to \$41,230,349 paper and \$20,315,446 gold, or some 31 millions in gold, or £6,200,000.

Five years later—in 1895—this expenditure had increased to \$76,000,000 paper and \$15,000,000 gold, or \$37,000,000 in gold, or £7,400,000. Since then, with rare exceptions, the budgets have followed an ascending scale. If, indeed, we concern ourselves with the sums actually realised, instead of those proposed by the budgets, we find that the amounts of the later budgets are these: in 1898, \$75,000,000 gold and \$119,000,000 paper, or \$121,000,000 in gold, or £24,200,000; in 1899, \$31,000,000 gold and \$104,000,000 paper, or \$77,000,000 in gold, or £15,400,000; in 1900, \$24,000,000 gold and \$105,000,000 paper, or \$69,000,000 in gold, or £13,800,000. Reducing to gold the sums estimated in paper, we find that since 1901, that is, since the time when the value of the currency was established on a fixed basis, the following sums have been expended: in 1901, £14,200,000; in 1902, £17,600,000; in 1903, £15,600,000; in 1904, £17,200,000; in 1907, £20,200,000; in 1908, £20,200,000; there has thus been a rapid progress.

The budget for 1909 amounts to \$270,000,000 paper, or £23,812,800. In this total are comprised two items: one of 15 millions of piastres in paper, value £1,320,000; the other of 3 millions, or £264,000, which are set aside to meet the expenses of the *fêtes* of the first Centenary of the National

Revolution. If we subtract these two items, which are necessitated by extraordinary expenses, we find that the increase of the administrative expenditure over that of 1908 amounts to £1,760,000.

We ought here to remark that these figures do not include the sums realised by the Government by means of the issue of stock: a procedure which constitutes an interesting chapter of Argentine finance.

We see, from these data, that the increase of the national expenditure is a constant, almost an inevitable factor, which occurs year by year in the Argentine administration. It now remains for us to inquire if unavoidable causes exist which force the State to spend without reflection, and, when funds are lacking, to contract loans which grievously burden the future; or whether, on the contrary, we have here a fault rooted in the soil of new countries which have no serious administrative traditions, and in which the spirit of order and economy has not yet grown to the stature of a national virtue. In the Argentine Republic the increase of public expenditure responds to causes which differ from those which are active in the countries of Europe; though we do not say that the latter do not also exercise their influence. A new country, inhabited by a sparsely-settled population, in possession of a rich but desert territory, its economic organism as yet barely developed, the Argentine has not yet produced a class of men practised in and prepared for practical administration. It is, on the contrary, afflicted with undisciplined political parties, full of impatience and of ideas of progress which cannot be immediately realised. It is not surprising that in the Argentine the increase of public expenditure responds to causes unlike those to be observed in other States, which number the years of their lives in centuries; which enjoy perfected administrations, possess a large class of men prepared for the science of government and finance, and whose needs, far from increasing, tend to restrain such expenditure.

So, considering the question under its most general aspect, we believe we shall not depart very far from the truth if we suggest, as the causes which produce the constant increase of the Argentine budgets, the following facts:

(1) the increase of administrative requirements, caused by the increase of the population ; (2) the increase of the public debt; (3) the depreciation of the currency until a recent period, and the increasing dearness of the necessities of life; (4) national and foreign wars (which causes now belong to history, and have happily ceased to exercise their influence in the Argentine); (5) the intervention of the State as manager or promoter of expensive public works; (6) the cost of an imperfect and expensive administrative machinery, and the wastefulness of the Government and of Congress; (7) a lack of control in the handling of revenue and expenditure; (8) increased military expenditure. Under this last heading we may include the heavy expenses which the Government has been forced to meet in order to maintain the integrity of its frontier and to avoid a war with Chili. Between 1889 and 1903 it has employed for this purpose a sum of £13,000,000.

A brief examination of each of these causes will suffice to show that they have been truly presented, and will also demonstrate the degree in which the phenomenon we are studying exhibits itself.

The influence of the first factor is assured and indisputable; it is enough to enounce it; it will be admitted without further criticism. The increase of the Argentine population, although it is not precisely all that might be desired, because it is not equally distributed, being larger on the coast than in the interior, is none the less considerable. The first national census of 1869 gave a population of 1,877,000 for the whole country; that of 1895 gave 4 millions; an increase of more than 2,100,000, or of 4·8 per cent. per annum.

Since 1895, although the Constitution orders a ten-yearly census, no census has actually been taken. But according to the most reliable calculations, the population of the Argentine amounts at present to more than 6 millions of inhabitants.

It is obvious that an increased population must also mean an increased administrative expenditure, as more telegraphs are needed, more bridges, roads, and railways, a larger police service, more lawyers and judges, and more schools

and teachers. No sensible person would pretend that the national expenditure could remain unchanged, while all else was developing and prospering. If the national revenue increases at an extraordinary rate, on account of the development of the population, it is only logical that the expenditure should increase likewise; but in a less proportion, it is true, as is proper under a good administration.

But this is not to say that it is permissible for administrators entrusted with the annual duty of presenting an estimate of public expenditure to do what is occasionally done, with such deplorable results—to estimate also in an exaggerated fashion the increase of the population, in order all the more to inflate the budget. The profound financial crisis, which affected the country in 1890, had no other cause. Everything is risked by the abuses of official expenditure. We have the proof of this in the fact that the economic possibilities of the country have never been so great as in these moments of financial crisis.

The continual increase of the public debt is another of the causes of exaggerated budgets. Since the first loan of £1,000,000, contracted by the Province of Buenos Ayres in 1822, which was later transferred to the account of the nation, until the present time, when, if no new loans have been contracted, at least the Government has put into circulation millions of stock which it was holding in reserve, the public debt has done nothing but increase, and in considerable proportions, attaining in 1909 to an amount of \$371,000,000 gold and \$237,000,000 paper, or £95,000,000 in all; and this, without including the last loan of £10,000,000 contracted by the Government in March 1909.

Another permanent cause of the increase of public expenditure is that which arises from the intervention of the State, as guarantor or promoter of costly public works.

The Argentine Constitution has very wisely instructed Congress to "promote the introduction and the establishment of various industries and of immigration; the construction of railways and navigable waterways; the colonisation of the lands belonging to the nation, and the importation of foreign capital and the exploitation of the rivers of the interior, by

means of protective laws, temporary concessions, privileges, and awards, which shall be an incentive to emulation."

In these sentences the writers were inspired only by the embryonic condition of the country for which they legislated. In the old-established European nations, where great accumulations of capital exist, where everything is done by personal initiative, where the commercial and industrial spirit is highly developed, many of the prescriptions of the Argentine Constitution would be useless or out of date. But here, where capital is only beginning to exist, as a result of the large commercial balance left over from each year of international trade; here where, to use the phrase of an Argentine thinker, "we are naturally rich but economically poor," the State has to turn to all trades; it has to go into business as contractor, encourage the establishment of industries by means of premiums or bounties, and stimulate the introduction of capital and of immigrants.

The last of the causes we have cited as determining the increase of public expenditure in the Argentine, is the increase of military expenses. We do not here refer to the extraordinary expenses which the Government had to support for a number of years, in order to acquire the elements of naval and territorial defence wherewith to meet the possible aggressions of a neighbouring State, but the ordinary annual expenses for the upkeep of the army and the navy.

Up to 1902 these expenses followed a scale of accelerated increase, and the country met them as a necessary sacrifice, dominated by the conviction that by this means it could evade the greater calamities of a war; and quieted at the same time by the promises which were given that once the danger had passed the expenses would naturally decrease.

Unhappily it was not so. Although the international horizon was clear of the cloud which had threatened to disturb the tranquillity of the country, the army and navy estimates showed no signs of abatement; on the contrary, they showed a tendency to increase. Thus in 1902, when the international question was in an acute stage, and a rupture was momentarily expected, these estimates amounted to £2,816,000.

Now, in 1909, with peace and tranquillity reigning on all sides, the war-budget still amounts to £1,980,000, and the naval budget to £1,452,000 ; or to more than £3,400,000 in all. We repeat that these are ordinary, not extraordinary budgets, whose amount is always considerable, and which have to be met by means of sums raised by special financial laws, or authorised by simple resolutions of the Cabinet or Council of Ministers.

To these military expenses we must add the sums required to pay the retiring gratuities of officers, and these already amount to a veritable army. These gratuities, granted under the provisions of an irrational law, have contributed to deprive the army of a large number of soldiers who might still be serving with honour and distinction.

But large as these expenses are, they are altogether eclipsed by the exorbitant sum of £14,920,000 voted by Congress in 1908, which, divided into eight annuities, is destined for the purchase of munitions of war, ships, etc.

The Argentine, by consenting to such expenses, which are as excessive as they are unjustified, is thus deliberately entering upon the policy of armed peace, which has produced such lamentable results among the nations of Europe.

The figures we have already given, which relate to the National Budget, represent a portion only of the expenses which weigh upon the inhabitants of the country ; for they do not include those amounts requisite for the support of the provincial and municipal administrations of the entire Republic. The amount of all the budgets together—national, provincial and municipal—amounted, in 1908, to £29,200,000.

Each one of the six-million inhabitants of the Argentine must thus annually contribute nearly £5 towards the support of the public administrations. But in reality this contribution is still heavier, as the expenses which figure in the budget are only a part of the administrative expenses, and we must still add the expenditure authorised by special laws or resolutions of the Cabinet.

This proportion of £5 per inhabitant is enormous ; to understand how large it is, we must compare it with the amounts charged in other and more advanced countries. On

the other hand it is stated that some 30 per cent. of the whole national expenditure is absorbed by the salaries of the administrative employés, functionaries, ministers, etc., and by pensions and retiring gratuities.

Commenting upon this abnormal situation, a sometime Minister of Finance remarked some years ago, in an official document which attracted attention by the energy and sincerity with which it was written:—

“Our budgets have constantly increased of late years. It is notorious that the personnel of the Administration is excessive, just as it is notorious that useless and expensive sinecures have been created, with the sole object of giving places to persons whose influence has been such that the State has undertaken to support them. Bureaucracy is increasing; industry, commerce, and all the spheres of free endeavour and of individual effort are abandoned by the sons of the country, who seek salaried employment or the exercise of intermediary professions which demand no effort. The number of young men who waste their time in seeking a place, instead of devoting their activities to work, in a country which offers wealth to all who will employ a little energy, a little perseverance, is surprising. But all want an easy life, even though it be poor and without horizon; all wish to live on the budget, and in order to gain their object they exhibit all kinds of ingenuity; they go seeking recommendations, and employ every means at their disposal.

“This host of pertinacious beggars of place results in the creation of new employments and new services, all equally useless. The national and provincial administrations pay more than \$65,000,000 in salaries and pensions. Each inhabitant contributes six golden dollars—£1, 4s.—towards the upkeep of an army of employés, which is an enormous sum. The public services of other countries cost, per inhabitant: in Switzerland, 4s. 9·6d.; in the United States, 6s. 4·8d.; in England, 8s. 2·88d.; in Holland, 9s.; in Austria, 11s. 2·88d.; in Belgium, 12s. 0·48d.; in Germany, 12s. 0·96d.; in Italy, 15s. 9·6d.; and in France 19s. 2·88d. These figures, taken from Paul Deschanel's work on Decentralisation, show us that we have outstripped all other nations in the matter of expenditure on the administration; even France and Italy,

where bureauracy is regarded as a calamity and as one of the causes of their economic decadence.

"We must check this avalanche by suppressing all useless employments and all superfluous services. It is essential to turn our young men aside from their present path, in order that necessity shall force them to exercise their energies in the vast field which is offered them by a new country, full of natural wealth, with a fertile soil and a benign climate." *

The reaction which Señor Rosa, in his genuine patriotism, had hoped for, took place a little after his departure from the Ministry of Finance; but unhappily its direction was the reverse of that he anticipated.

We have examined the expenses of the public administrations; we have measured the weight of the public debt; we must now examine the treasury receipts, in order to discover what are the most important sources of the revenues which fill it, and what elasticity they possess.

The Argentine Constituents, after having explained, in the sententious preamble which serves as a preface to their great political code, what place was theirs who were building the great edifice of the State, turned to consider from what sources the revenues for the Treasury might be drawn, in order to satisfy the necessities of the administration of the country.

To this effect they enacted that these resources should be: "The taxes upon imports and exports; the sale or allocation of lands forming part of the national territory; the postal revenues, and the other taxes, which the General Congress will impose equitably and in proportion to the population; also such loans and credit operations as the same Congress shall decree for the urgent needs of the nation, or for undertakings of national utility." (Article 4).

Has the foresight of the Constituents in establishing these sources of revenue been justified? or, in other words, were the elements of revenue created by the fundamental charter efficacious? A little study of the system of Argentine revenue will show that of all these sources enumerated, the only ones that have a permanent and fertile existence

* See *Mémoires des Finances de 1889*, by J. M. Rosa, Vol. II., p. 174.

are those relating to the customs receipts; that is, to the duties of export and import. The others either give poor and uncertain results, such as the sale and allocation of national lands; or are of a perilous nature and to be used with restraint, such as loans and transactions on credit; or they are drawn from services which produce revenue only within narrow limits, such as the Posts.

Besides the sources appointed by the Constitution for normal requirements and ordinary periods, the same charter enumerates another source to be resorted to in exceptional cases or for purposes of defence, when the common security and the general welfare of the State may demand it. This source is the imposition of "direct taxes, during a fixed period, and equally proportioned all over the Republic."

It follows from these limits that the principal effective source of revenue intended by the Constitution to form the Federal Treasury is that of indirect taxation. So far the new fundamental code has not only followed the example of the principal nations, and hearkened to the counsel of economic science, but has also put into effect an eminently practical and far-seeing procedure.

Señor Alberdi, who of all writers has most profoundly studied the system of revenue established by the Argentine Constitution, has stated that indirect taxation is the most fruitful fiscal resource, as is proved by the customs revenues, which are relatively greater than those of all other taxes put together. The indirect tax, adds Señor Alberdi, is relatively the most equitable, as every one pays according to his tastes and his powers of consumption; the foreigner as well as the son of the soil.*

As we have seen, the Constitution was far-seeing and lucid in its definition of the character of the revenues of the National Treasury: that is, in fixing upon the customs duties, the sale and allocation of land, the products of the Posts, and other contributions to be imposed by Congress for normal situations in a proportional and equitable manner; and also in deciding upon the imposition of direct taxation for determined periods, and relatively equal all over the country, for exceptional and abnormal times.

* See *Sistema económico y rentístico, Obras de Alberdi*, Vol. IV. p. 419.

According to the commentator quoted above, when the Constitution left Congress the faculty of establishing, equitably and in due proportion, taxes of other kinds, and abstained from naming them or limiting them to a fixed number, it was because it wished to give the legislature the right of adopting all those recognised by economic science, in order that they might be imposed according to the principles of the Constitution itself.

If we now cast an eye over the table of the national revenue, we shall see that in 1908 the nation collected, in the form of direct taxes, the sum of £583,344; in the form of indirect taxes, £4,803,920; for the remuneration of services, a sum of £1,023,440, which had not the character of direct taxation; as the usufruct of land belonging to the national domain, and the profits of national undertakings, £2,510,240; and as capitation fees, £8000. We must also include in the receipts the sums contributed by some of the provinces, and by the National Bank, to the service of the national debt; guaranteed, on their account, by the National Treasury. If we add together all these sums, which for one reason or another were placed to the account of the nation in 1908, we arrive at a general total of £22,392,160.

This revenue may be analysed as follows:—

The group of direct taxes is formed by the land-tax of the city of Buenos Ayres and of the National Territories, which figures in the balance-sheet as a sum of £320,320. In reality the product of this tax is greater—amounting to more than £616,000—but the nation is by law compelled to give a certain proportion of this sum to the Municipality and another to the National Council of Education; what remains when these obligations are satisfied belongs to the Government. The commercial and industrial licences of the Federal capital and the National Territories form the second class of direct taxes, their yield being £245,520; but, as in the case of the land tax, the Government has to give part of this sum to the city and part to the Council of Education.

The indirect taxes are those which produce the largest yield: they include the customs duties upon imports, which in 1908 yielded £12,036,000. The consular duties brought in £100,000; stamps and fees accounted for £118,000.

Besides the resources furnished by the indirect imposts of the customs, there has since 1891 existed in the Argentine another kind of indirect internal duty, which is charged upon consumption, and which every day acquires a greater importance, in proportion as the country is developed and as wealth and population increase.

These duties were established at a critical moment of the country's history, and they mark a degree of evolution in the financial system of the country. In 1891, when the liquidation commenced of the great financial crisis which had completely overturned the economic organisation of the Argentine, the strength of the country was broken, the Treasury was empty, and there existed a public debt which was all the more grievous in that the paper currency was absolutely inconvertible, and decreased in value daily, in the midst of all the difficulties which characterised that terrible time.*

This overwhelming situation resulted in the establishment of indirect internal imposts; that is, the branch of taxation which is levied on the national industry and national production; but which is, in all contemporary nations, one of the most fruitful sources of revenue; the more so as its collection demands few sacrifices on the part of those who pay it.

The realisation of this fortunate idea, which effected an important innovation in the revenue system, was due to the administration of Señor Carlos Pellegrini, in which Vincent-Fidel Lopez was Minister of Finance, and was perhaps the most important and meritorious act of the administration.

During this first year of 1891, the receipts furnished by this branch of taxation did not attain to the expected results; they amounted only to £224,682, distributed as follows: Alcohols, £123,511; beer, £23,549; matches, £76,617; banks and companies, £982; total, £224,660. Out of a total collection of \$75,501,077 paper and \$497,120 gold, or £6,743,518, the yield of internal duties amounted only to 3.29 per cent. Four years later, after the administration of internal duties had undergone considerable modifications and improvements, so that the system of collection had become more exact, these imposts furnished the Treasury with £676,946, which out of

* See *Memoria del Ministerio de Hacienda*, 1890, p. 72.

a total collection of \$29,805,651 in gold and \$28,958,460 in paper, or £11,571,076, amounted to 5·85 per cent. of the whole.

In 1897 the budget voted by Congress increased the general revenue to be collected to \$33,492,000 in gold and \$47,835,000 in paper (deducting from this last sum 12 millions of paper produced by the shares of the National Bank and 2 millions as the profits of the Bank of the Nation), or in all \$148,000,000. The yield of internal duties had increased to \$19,360,000, or 13 per cent. of the whole revenue.

In 1908 the domestic imposts produced £4,000,000, or 17 per cent. of a total collection of £22,400,000. The chief element of this revenue was furnished by the duty on the consumption of alcohol, which produced £1,496,000. The tobacco duty came second with a yield of £1,760,000. Matches yielded £269,000; beer, £308,000; insurances, £61,600. These figures show how rapid has been the increase of the revenue from internal duties on consumption.

If we disregard that portion of the revenue which is raised by imposts, and examine the yield of the industrial undertakings exploited by the nation, we shall find that as yet they are far from constituting any real resource for the Treasury, and far from compensating the large amounts of capital employed. Comparing the yield of these undertakings with the working expenses, we find that the balance, as a general thing, is on the losing side.

This is the case with the four railways belonging to the nation, whose yield, in 1905, was £1,012,000. The working expenses, the renewal of rolling-stock, and repairs of the permanent way, completely absorbed the revenue. We must hope that this ruinous state of things will disappear presently, when the network of State railways is completed, and the lines unite important centres of production, and the system of administration is perfected.

After this miserable result we may point with relative satisfaction to another important industrial undertaking of the Government: the sanitation works of the city of Buenos Ayres. Apart from the hygienic advantage, which is already very evident, the financial results are worthy of attention, as they show that this undertaking will very shortly cover, if

not the whole, at least a portion of the interest on the capital employed.

The ordinary working expenses of this undertaking amounted in 1908 to £258,202, while the revenue amounted to £673,200. This left a balance in favour of the Treasury of £415,000, of which a great part was employed, by virtue of special laws, in the enlargement of these works, which enlargement will still further increase the revenue. The financial result of this undertaking is a conclusive proof that such enterprises, when directed with method and intelligence, are always profitable to the State.

The Postal Service, which the authors of the Constitution expected to be a considerable resource, has hitherto given only negative results; the receipts have not hitherto covered the working expenses. The ordinary expenses of the Department of Posts and Telegraphs were £1,144,000 in 1908, while the effective receipts for the same year were only £936,320; giving a deficit of £207,680. In reality this deficit was far greater, because fresh expenditure was necessitated by the construction and repairs of telegraphic lines, and certain purely nominal receipts, arising from the franking of official correspondence, were put on the credit account.

If we now proceed to examine the revenue derived from the national estates, we find that its most important item proceeds from the sale and allocation of the public lands. This revenue, which figures among those enumerated by the fundamental charter as forming the resources of the Treasury, has by no means produced what it should, owing to the lack of method or foresight in the management of this important administrative department. In 1908 this source produced only £278,080; and this sum represents a considerable increase over previous years, especially over the year 1904, when the revenue was only £27,368. But when we take the fact into account that the nation still possesses 212 millions of acres of land, which are situated in territories whose population is rapidly increasing, and which will shortly be well served with railways, we perceive at once that these lands, which are a powerful source of attraction to immigrants, may also in time become a very important source of revenue.

The revenue derived from the exploitation of industrial

undertakings and from the national domains being thus eliminated from the list of effective revenues, as being nominal or insignificant, we see that the nation has no other positive resources than the customs duties and imposts upon consumption. This explains the development of the budgets of the last few years, in which the domestic and indirect duties have increased the fiscal receipts.*

One of the characteristics of the present situation of the Argentine is the remarkable elasticity displayed by the increase of the fiscal resources. At the present time few countries in the world present a similar spectacle. Here, more than in any other country, the official revenues are in direct relation to the result of the harvests and the exportation of the products of the ranch; so that the table of fiscal receipts is a kind of infallible barometer, which measures the degree of wealth and prosperity of the general population.

If—not to go back too far in our investigations—we take the thirteen years from 1895 to 1908 as an example, and if we convert into gold the sums received in paper, according to the average rate of exchange for each of these years, we find, in the first place, that in 1895 the Treasury received £7,600,000. Since then these figures have increased in rapid progression; passing from £7,600,000 to £8,600,000; thence to £10,000,000; thence to £10,600,000; thence to £14,600,000; but in 1900, through economic causes such as the loss of harvests, anthrax, the closing of English ports to Argentine live-stock, joined to such political causes as the fear of complications with Chili, the revenues fell to £13,000,000. But progress was not long in establishing itself anew; in 1904, the revenue was £15,200,000; in 1907, £21,200,000; and in 1908, £22,400,000, which is the highest figure the administration has ever known.

To appreciate this enormous progress at its true worth, we must take the fact into account that it was precisely during these years that the nation released several sources of revenue which had previously been taxed; such as duties levied on the export of natural products, and on natural or artificial wines, and additional duties levied on importations,

* See *Memoria del Ministerio de Hacienda*, 1895, Vols. IX. and XI.

all of which represented a respectable number of millions per annum.

Thus in thirteen years, from 1895 to 1908, the fiscal receipts have increased by £14,800,000, or by 194 per cent.

Such a result cannot but be satisfying, and it would be the most eloquent proof of the intense vitality of the Argentine finances were it not for the still more rapid increase of official expenditure. This also has increased, rapidly and enormously, more often than not exceeding the revenue, and leaving each year a more or less important deficit, which, accumulating from one year to another, has finally to be converted into a consolidated debt, whether foreign or domestic. "The practical result of the budgets from 1863 to the present time," says an official document, "has been an uninterrupted series of deficits.*"

In the face of this situation the patriotic advice which the Minister of Finance, J. M. Rosa, gave the Government and the Congress in a memorable document some years ago, is more than ever applicable.

"We must do our utmost to economise," he said, "by restraining ourselves and reducing our expenses to the absolutely indispensable. It is only by applying ourselves to the work of simplifying our administrative services, by suppressing useless formalities and superfluous employments, by scrutinising the least details of the public expenditure, that we shall succeed in making large economies. It is certain that to purge the administration of its ancient vices, to sweep away all useless appointments, to refuse to find vacant places at the bidding of power and influence, and to establish the strictest rules of economy, is a task of no mean difficulty; but we cannot stop to think of the animosity and the vindictive temper which it may arouse when duty renders such conduct necessary."*

If Argentina truly wishes, not to compromise her lofty destinies, but to remain a centre of attraction to the labourers or the disinherited children of fate to whom she offers the resources of her fruitful soil; if she aspires to be, in the twentieth century, the great centre of the world's emigration, as were the United States in the nineteenth

* *See Memoria del Departamento de Hacienda de 1899*, by Joseph M. Rosa.

century, she must obtain an administration both methodical and economical; careful of the public moneys, and at the same time open to all material progress. It is thus that she will win the confidence of men and of capital; that is, of the two elements which she must still multiply in order to become a great nation.

CHAPTER II

THE PUBLIC DEBT

Statistics of the public debt on the 1st January 1909—History of the public debt—The first loans.

The financial crisis—Consolidated loans—The Romero arrangement—Loan for the rescission of guarantees—The internal public debt—The total of the Argentine public debt, and its annual cost in dividends and redemption—The proportion of financial charges as compared to other budgetary expenses.

The burden of the public debt is heavy, but not unduly heavy in relation to the productive power of the country—The necessity of restraining further issues and of converting old debts—The efforts of the Argentine to improve her credit.

ALL the vicissitudes through which the Argentine has passed in the course of the nineteenth century have left their traces upon the history of the National Debt. To the legitimate uses of credit have been joined abuses; but all this now belongs to the past, and we do not intend, in a book dealing with matters as they are, to recount this history at length, nor to comment upon it nor criticise it.

The consolidated National Debt, on the 1st July 1909, amounted to £62,892,428. It may be analysed as follows:—

FOREIGN DEBT.*		
	Circulation on 1st January 1909.	Annual Cost, Interest and Amortisation.
	£	£
Loans at 5 per cent. ...	23,350,139·76	1,702,585·29
Loans at 4½ per cent. ...	7,697,262·88	516,147·42
Loans at 4 per cent. ...	29,820,312·79	1,454,465·64
Loans at 3½ per cent. ...	2,004,710·40	121,238·09
Total ...	£62,882,425·83	£3,794,436·44

In the total given above is an important sum of which the cost, though entered in the National Budget, is really borne by the various provinces. Items in this amount are a sum of

* By 15th September 1909, the amount of the debt had been reduced to the following figures: 5 per cent., £22,702,330; 4½ per cent., £7,579,580; 4 per cent., £29,728,562; 3 per cent., £1,920,000; total, £61,930,472.

£6,800,000, for which the Province of Buenos Ayres is responsible; the £3,000,000 of the conversion loan of Santa Fé; £2,800,000 taken up by Entre Rios; and the Córdoba conversion loan of £1,000,000; while Mendoza accounts for £600,000 and the National Bank in liquidation, for £1,800,000. This establishment, although belonging to the Government, bears the cost of its debt out of its own resources. Eliminating these £16,000,000, we find that the external debt, whose cost is borne by the Treasury, amounts not to nearly £63,000,000, but to £47,000,000.

We shall ultimately have occasion to inquire how far this debt weighs upon the resources of the Treasury, what the burden per inhabitant amounts to, and how it stands in relation to the debts of other countries. For the moment we must glance backward in order to realise the historical conditions under which this debt was contracted, and what its destination has been.* The first credit transaction effected by the Republic abroad was concluded a few years after the Declaration of Independence. In 1822 the Province of Buenos Ayres, which had always been the heart and head of the Republic, taking its place, indeed, under certain conditions, and under others representing it in foreign countries, was fortunate in having at its head a progressive Government, which, by its profitable initiative, has left ineradicable traces behind it. The President was General Martino Rodriguez; the Ministers included Bernadino Rivadavia and Manuelo-Josepho Garcia.

This Government cast its eyes over the empty surface of the vast Argentine territory; it saw immense wealth unexploited, for lack of the necessary elements; it realised its great need of material progress, and understood, with a just and clairvoyant judgment, that of all these needs the most urgent were the construction of a port for the exchange of products with the outside world, the instalment of a water supply which would ensure health to the inhabitants, and the establishment of villages along the line of the new frontier, serving as desert outposts, and constituting a military pale to withstand and confine the irruptions of the savage Indians.

* See, in *The North American Review* for May 1902, an article by Señor Alberto Martinez, entitled: "National Debts of the World. IX. Public Debt of Argentina."

For the realisation of these then important undertakings of public utility the Government of 1822 resolved to obtain the necessary resources, by raising a loan of a million sterling, giving as consideration a dividend of 6 per cent. and an annual redemption of 1 per cent.; the House of Baring to act as agents for the loan. Unhappily the executive power employed the resources furnished by this transaction in founding a bank which had a very short existence, and the intended public works were not effected. More than half a century elapsed before their realisation.

The loan was issued in 1824, and was taken up in entirety at a discount of 30 per cent., so that the Government received £700,000. For many years, at the time of the Rozas tyranny, and during the ensuing period of national dissolution, the payments on this loan were suspended; not until 1856, when the tyranny was overthrown and the Argentine nation reconstituted, did the Government of Buenos Ayres instruct Norberto de la Riestra to come to an understanding with the creditors, and to offer them the punctual payment not only of the future dividends, as they fell due, but also of all those overdue, on deferred stock at 11s. 2d., at 2 per cent. interest, with an annual redemption of $\frac{1}{2}$ per cent. This debt is to-day extinguished, and has left no traces on the budget.

The second loan contracted by the nation after its reorganisation was intended to cover the expenses of the war to which it had been unreasonably provoked by the tyrant of Paraguay in 1865; and this loan has also disappeared from the ledger of the public debt.

The third national loan was contracted in 1870, the sum being £1,042,978, under the Presidency of Señor Sarmiento; and the capital was required for the accomplishment of public works. This loan and that preceding it were finally converted into others which carried a lower interest.

Then these transactions were followed by others, of which we will briefly enumerate the details.

The railway loan, authorised by the law of the 2nd of October 1880, was to raise the sum of \$12,000,000; a sum required for the extension of the Central North Railway as far as the town of Jujuy, the Andean line as far as San Juan,

and for the branch line to Santiago de l'Estero. It bore 6 per cent. interest, with an annual redemption of 1 per cent. It was issued in London, in June 1881, for the amount of £2,450,000, at a price of 91 per cent.

The loan entitled "The Public National Funds," which was decreed by the laws of 12th October and 28th June 1883, enabled the Government to pay for the shares in the National Bank (to-day in liquidation), which it had acquired. This loan, bearing 5 per cent. interest and 1 per cent. redemption, was issued in May 1884, by Baring Brothers, at a discount of 84·5 per cent., and amounted to £1,683,100.

The loan entitled "Harbour Works of the Capital," authorised by the law of 27th October 1882, was contracted for the construction of the new harbour which the city of Buenos Ayres required for the development of her foreign trade. An issue of \$20,000,000 in gold was decreed, bearing 6 per cent. interest, with 1 per cent. redemption.

The "Public Works" loan was created by the law of 21st October 1885; its amount was £8,400,000, and its object the unification of certain loans required for various undertakings. The shares bore 5 per cent. interest with an annual redemption of 1 per cent. The sum issued was £8,333,000, of which £4,000,000 was placed in London, in January 1886, at 80 per cent., and the remainder in January 1887 at 85½ per cent. This loan was guaranteed, as far as the interest was concerned, by the customs revenue, and the representatives of the investors had on this pretext reserved certain rights of control over the administration of this revenue.

The "Central Northern Railway Loan" was divided into two series. The first, authorised by the law of 9th October 1886, was of £4,000,000; but of this sum only £3,968,200 was issued, as follows: to London, in June 1887, £1,300,000 at 91·5 per cent.; in April 1888, £1,500,000 at 94 per cent.; in May 1889, £1,168,200 at 97 per cent. The second series, authorised by the law of 30th October 1889, amounted in all to £3,000,000, of which only £2,976,000 was issued. The two loans bore an interest of 5 per cent. and a redemption of 1 per cent.; they were contracted to allow of the prolongation of the Central Northern Railway.

The "National Bank" loan, created in virtue of the law of 2nd December 1886, authorised an issue of £2,058,200, to enable the Government to pay the debt which it had contracted towards the said Bank. The bonds were issued at 90 per cent.; they bore an annual interest of 5 per cent., with a redemption of 1 per cent.

The "Treasury Bonds Conversion" loan, authorised by the law of 21st June 1887, was employed, as its description indicates, in the consolidation of a debt contracted for a short term. The issue required was \$5,078,330 paper, but only £624,000 was actually realised.* The stock carried an annual revenue of 5 per cent., with 1 per cent. redemption, while the old Treasury Bonds have an interest of 9 per cent.

The loan contracted by virtue of the law of 15th August 1887 was intended to balance certain debts on the part of the National Government towards the Government of the Province of Buenos Ayres. The issue was one of £3,973,700, the interest being $4\frac{1}{2}$ per cent. and the redemption 1 per cent.; it was taken up at 90 per cent.

The "Conversion of Debts" loan, at 6 per cent., contracted in virtue of the law of 2nd August 1888, was an operation of consolidation and reorganisation of debts. The issue amounted to £5,290,000. The bonds, which yielded $4\frac{1}{2}$ per cent., with 1 per cent. redemption, were negotiated in London, in February 1889, at 90 per cent.

The "Conversion of Hard Dollars" loan was issued in virtue of the law of 2nd July 1889, which authorised an issue of £2,600,000 to be applied to the conversion of debts contracted in hard piastres. The new stock was to yield an interest of $3\frac{1}{2}$ per cent., with 1 per cent. redemption. The issue actually amounted to £2,659,500.

The "Consolidation Loan" (authorised 24th January 1891) was one of the most important credit transactions ever effected in the Argentine Republic: a transaction which evokes memories of a critical period which we ought briefly to recall.

When Signor Pellegrini's Government came to power, on the 6th August 1890, the country was suffering from a

* The sum of \$5,078,330 is equivalent at the present discount of paper to £446,873; in 1887 the value of the paper piastre was higher.—[TRANS.]

political upheaval, and at the same time was entering upon a time of severe financial crisis, "the most violent, the most desperate crisis which has ever afflicted the Republic, and put its honour to the test," according to the words of Vincenzo Lopez, the eminent finance Minister of that administration.

The Treasury had exhausted its resources, in order to increase and support the funds of the National Bank, whose debt to the Government amounted to \$47,491,483 * in paper, and £2,528,224 in gold, while its debt to foreign creditors amounted to £3,708,037, and to home creditors £2,328,800.

If the situation of the National Bank, which served as the Government's treasury, was serious, that of the National Mortgage Bank and that of the City of Buenos Ayres were no less grave. The first owed \$1,690,833 in paper and £111,475 in gold in dividends, and the second was drained dry by its debts, amounting to \$34,646,533 paper and £92,339 gold at home, as well as £1,960,000 abroad.

From the outset the Government concentrated all its efforts upon the solution of these three grave problems. It proposed the reconstitution of the National Bank; it would enable the Mortgage Bank to continue operations, chiefly by repaying the advances which it had made to the State; and assist the City of Buenos Ayres to meet its engagements in respect of the interest of the foreign debt, constraining it to collect and employ the municipal revenues in a more methodical manner.

The prime object of this important transaction was "to give the country a period of economic repose, by provisionally suspending the removals of metallic currency for the liquidation of the nation's foreign engagements," as the Government declared in the message which accompanied its proposal. To achieve this end, the creation of a consolidation loan was proposed, amounting to £12,000,000, and increased later on to £15,000,000 upon the advice of the lenders, the result being destined, for a period of three years, for employment in paying the interest on the nation's loans and in relieving the Treasury of the burden of guaranteeing the dividends of the railways.

* This amount is not reduced to gold, the rate of exchange not being fixed at the time.—[TRANS.]

In accordance with agreements concluded between the Government of the Republic and the banking houses which undertook to negotiate the loan, the banks undertook to accept, during a period of three years, as consideration for the debt, and for the effectual guaranteeing of the railways, bonds of the loan itself; and undertook, moreover, to accept them at par. The issue each year was to be proportional to the sum necessary to pay the interest on the debt.

The nation, on the other hand, undertook to set aside for the payment of the interest on the said loan 6 per cent. of the customs receipts, which were subjected to a monthly levy of the amount required, the amount affected by the prior rights of the loan of 1885 being deducted first.

The nation also engaged not to increase its foreign debts, whether by borrowing or giving guarantees, during the three years fixed for the issue of the loan.

The total amount authorised was £15,000,000, the interest 6 per cent., and redemption was to commence at the end of three years, to be completed in thirty years. Coupons could be paid to the State in settlement of customs duties. Of the above nominal sum, only £7,691,725 was actually raised, £7,308,275 remaining unissued for the following reasons:—

Under the administration of Señor Saenz Peña, when Señor Romero was installed in the Ministry of Finance on the 12th October 1892 he found the Consolidation Loan in process of issue, the stock being sold at need, the 6 per cent. bonds being guaranteed by the customs receipts; they were then selling in London at about 63 per cent. Señor Romero estimated that if the system of paying debts by means of debts is generally a ruinous one, it was especially so in this case, where the transaction was being effected by means of bonds so badly depreciated as those of this loan.

The first important act of this Presidency was to make an arrangement with the representatives of the bearers of the foreign debt, by which they consented to a reduced interest for five years—that is, until 1898—the redemption charge being suspended simultaneously. In the following years, from 12th July 1898 to 12th January 1901, the full interest alone was to be resumed, and from 1901 the payment of the redemption charge would also be resumed.

As a consequence of this arrangement, it was decided to issue no further stock of the loan, even in cases where the issue was authorised: as, for example, in the effective guarantee of railway stock. Holders of the latter would receive payment on the basis of the price at which the shares were quoted. This is why the Consolidation loan issue of 1891 was confined to the sum already cited.

The "Travaux de salubrité," or Water Supply and Drainage loan, authorised by the law of 30th January 1891, to the extent of £6,750,000, in bonds bearing 5 per cent. interest and 1 per cent. redemption, was created under the following conditions:—

The Government of Señor Juarez Celman, which preceded that of Signor Pellegrini, was inspired by the Spencerian doctrine, which asserts as a principle that the State is always a bad administrator, and fell into financial and administrative errors which were to cost the country dear indeed. Thus it resolved to place in the hands of individuals all the industrial enterprises undertaken by the nation, among which was the scheme for supplying the city of Buenos Ayres with water and facilitating the elimination of its filth and sewage.

Every one very soon saw, however, that a serious mistake had been made. The individual firm entrusted with these important services was exclusively preoccupied in exploiting the public, and its methods resulted in protests and resistance on the part of the inhabitants of Buenos Ayres. On 6th August 1890, the Government, Pellegrini being president, came to the conclusion that it was its duty as an administration, and was also a matter of political efficiency, to place the sanitation works in the hands of the State once more; and with this object it obtained an authorisation to contract a loan of £6,750,000, at 5 per cent. and 1 per cent. redemption. Such was the origin of this loan, of which stock to the value of £6,374,995 was issued.

The "Rescission of Railway Guarantees" loan, authorised by the laws of 10th January 1896 and 30th December 1898, was contracted to disburthen the State of the heavy obligations which weighed upon it as a result of having guaranteed an interest of 6 per cent. on enormous capitals employed in the construction of railways. With this object £11,699,957

worth of stock was created, and issued at 4 per cent. and $\frac{1}{2}$ per cent.

The loan for the "Conversion of Provincial Debts," created by the law of 8th August 1896, was justified by the highest considerations of national solidarity, and of the defence of Argentine credit abroad.

The enormous debts contracted by the Provinces, unauthorised and uncontrolled by the central power, quickly resulted in a veritable bankruptcy, at the end of a period of waste and folly, of unchecked and uncalculating expense.

The nation, which had in no way intervened in the matter of these loans, and had contracted no obligations whatever on their behalf, might strictly have refused to accept any responsibility for such heavy liabilities; but it is indubitable that the insolvent condition of the Provinces in the European markets might have affected the credit of the nation, the latter being, in foreign eyes, involved in all these individual failures.

What President Quintana said in his inaugural address on the subject of the peace of the Provinces, which is also the peace of the State, may also, with no less reason, apply to credit.

On the other hand, the nation could not remain indifferent to the precarious situation created by the suspension of payment in the Provinces. As practically all their revenues were already pledged, so that they could not pay interest on their debts for many years, the legal action of their creditors might fetter their administrations, oppose serious obstacles to the development of their sources of wealth and production, and, in short, inflict serious damage upon the entire country.

These very serious considerations decided the public powers to lend the Provinces their aid, so that the latter might make equitable arrangements with their foreign creditors, and as far as possible free themselves from such heavy liabilities.

These arrangements were for the most part effected by exchanging the $4\frac{1}{2}$ per cent. stock of interior debt which the Provinces promised against 4 per cent. stock of the foreign debt, which the nation remitted to the creditors of the Provinces.

The total of these provincial debts amounted to £30,355,190, and the nation, for the complete liquidation of the same, gave 4 per cent. stock, bearing a redemption charge of $\frac{1}{2}$ per cent., to the value of £17,199,899. The interest and annual redemption charges of this stock amounted to £773,995.

On the other hand the nation acquired by this arrangement $4\frac{1}{2}$ per cent. stock of the loan known as the Guaranteed Banks loan to the value of £9,175,233, the interest and redemption charge (of 1 per cent.) amounting annually to £504,638. Adding to this sum that of £232,000, as the contribution of the Province of Buenos Ayres, and £51,220 furnished by the Province of Entre Rios, we have a total of £827,858 annually. The exchange of the internal against the external debt thus produced a temporary profit of £53,863 per annum; we say temporary, because the 4 per cent. stock has a later date of redemption than the $4\frac{1}{2}$ per cent.

The "Conversion of Municipal Stock" loan, authorised by the laws of 25th September 1897 and 15th December 1898, was raised, to the extent of £1,540,000, by the issue of stock at 4 per cent. and $\frac{1}{2}$ per cent. The result of this issue was destined to pay what still remained owing to the creditors of the National Bank in liquidation.

The law of 5th January 1899 authorised a loan of £6,000,000, intended to balance the debts of the Public Treasury; the alcohol duty being offered as guarantee to the extent of £800,000 per annum; but hitherto the loan has not been negotiated, and there is no longer any question of this issue.

Such, briefly detailed, are the antecedents of the various foreign loans contracted by the Argentine nation. As for the domestic consolidated debt in 1905, it was the object of a complete reorganisation, so that to-day the history of its origins is not of much practical interest. It amounted, on 1st January 1909, to £7,639,760 in gold and £9,199,581 in paper, of which £6,900,000 was in gold and £7,700,000 in paper in 5 per cent. stock, £710,620 in gold in $4\frac{1}{2}$ per cent. stock, and £880,000 in paper in 6 per cent. stock. This gives us a total (in gold) of £16,839,341, on which the charge in interest and redemption absorbs an annual sum of £1,004,445.

Here is the analysis of the internal debt :

INTERNAL DEBT, 1st January 1909.

	Gold.		Paper.	
	Stock in Circulation.	Interest and Sinking Fund.	Stock in Circulation.	Interest and Sinking Fund.
6 per cent. loan,	—	—	£880,000	£58,080
5 per cent. loan,	£6,929,140	£422,100	18,908,140	1,110,898
4½ per cent. loan,	710,620	40,750	—	—
Totals ...	<u>£7,639,760</u>	<u>£462,852</u>	<u>£19,788,140</u>	<u>£1,168,978</u>

As we explained in our first edition, the first action of the Government which assumed power in October 1904 was to convert the various loans of the internal debt, which bore an interest of 6 per cent., and amortisation charges of 6, 4, 3 and 2 per cent., into one single loan at 5 per cent., with a redemption charge of 1 per cent. This operation gave the following results: The amount of 6 per cent. stock, including National Bank stock, amounted to £5,888,881, or \$66,918,300 paper. Of this total \$50,814,000, or £4,471,632 were converted in the Argentine and £664,884 in Europe, or in all £5,136,516; the balance then amounting only to £730,184. The result was that the average price obtained for converted stock was 87·59 per cent., and for unconverted stock 12·40 per cent.*

* The following figures relative to the Argentine foreign loans taken from the Investment Handbook of the International Stock Exchange, may interest the reader.—[TRANS.]

Argentine 5 per cent. Stock (1886-7): Authorised, £8,290,100: issued or subscribed, £6,306,500. Price on 1st January 1910, 105½.

Argentine 4½ Sterling Loan (1888-9): Authorised, £5,263,560; issued, £4,322,060. Price on 1st January 1910, 100.

Argentine 3½ per cent. External Bonds (1889): Authorised, £2,639,500; issued £1,923,160. Price on 1st January 1910, 80.

Argentine 4 per cent. Railway Rescission (1895): Authorised, £11,607,100; issued £10,205,100. Price on 1st January 1910, 97¼.

Argentine 4 per cent. Gold Bonds (1900): Authorised, £2,828,515; issued, £2,752,855. Price on 1st January 1910, 91.

Argentine Cédulas, Series B. (1886). These are certificates to bearer issued by the National Mortgage Bank in lieu of cash lent to borrowers on real estate. They were first issued in 1886, when a total of \$50,000,000 was issued in three series, A, B, and C. They are redeemable by sinking funds of 1 per cent., and under Article 60 of its organic law the National Mortgage Bank has to add to these funds the sums in cash received from its debtors on account of advances of capital or sale of properties. Cédulas are guaranteed by the nation.

In circulation, 31st August 1909, \$1,175,250. Cancelled, \$13,824,750.

Although the Minister who effected this operation, exceeding the advice of competent persons, or rather defying their judgment, took it upon himself to issue a fervent panegyric of his transactions in an official document, we none the less consider that the fundamental defect of this conversion lay in having largely reduced the amortisation rate of some of these loans, bringing them down from 6 per cent., 4 per cent., 3 per cent., and 2 per cent., to a uniform rate of 1 per cent.; as the sinking-fund, as a general thing, in the case of all financial administrations, and especially of those of a country without any great experience of government, is a restraining factor, a limit which Governments and Parliaments impose upon themselves, in order not to spend all they collect. Without this money-box, this "woollen stocking" of Governmental savings, as M. Neymarck called it, it is certain that there would be no trace in the Argentine Treasury of all the millions it has paid in amortisation during the last few years; so that the present generation would have cast upon the shoulders of the coming generation a far heavier burden than that the latter will inherit as things are.

Returning to the external debt, we may state that among the loans which figure in the national liabilities are eight, with a capital of £23,350,139, at 5 per cent. interest; two, with a capital of £7,697,263, at $4\frac{1}{2}$ per cent.; eleven with a capital of £29,840,315, at 4 per cent., and one of £2,004,710 at $3\frac{1}{2}$ per cent.

The public debt, external and internal, amounts to the following:—

External debt	...	...	...	£62,892,428
Internal debt	...	...	...	16,839,365
				<u>£79,731,793</u>

Interest, 7 per cent. Prices have varied from $24\frac{1}{4}$ to $48\frac{3}{4}$. Price on 1st January 1910, $44\frac{1}{2}$.

Buenos Ayres Water Supply and Drainage Bonds (1892). Authorised, £6,324,400. Present amount, £5,620,820. The operation of the Sinking Fund in January 1910 will further reduce this amount. Prices have varied from $52\frac{3}{8}$ to 106. Price on 1st January 1910, 106.

Buenos Ayres Sterling Bond 3 to $3\frac{1}{2}$ per cent. Authorised, £10,296,000; issued, £9,796,000. Price on 1st January 1910, $69\frac{3}{4}$.

Let us see to what extent the interest on this debt weighs upon the Budget:—

External debt	£3,794,436
Internal debt	1,004,445
Total on 1st January 1909 ...	<u>£4,798,881</u>

In the tabulation of the foreign debt we have not included the new loan of £10,000,000, the stock being known as "Argentine Internal Credit, 1909," bearing 5 per cent. interest and a 1 per cent. consolidated sinking fund, which the national Government has just raised in Europe. This loan, which was readily taken up, was divided in the following proportions: England, £2,960,000; France, £3,200,000; the United States, £2,000,000; Germany, £1,640,000.

Taking this new loan into account the total of the external debt is £72,892,428.

The various amounts of interest payable on the whole National Debt, external and internal, converted into gold at the rate of 4s. per piastre, represent a total of £4,778,882. As we have stated before, this burden does not weigh exclusively on the Treasury; we must deduct from it the interest paid by the Provinces and the National Bank, or, a sum of £687,628, so that the interest paid by the nation amounts in fact to £4,111,253. Comparing this figure with the total of the general budget, we find that the interest on the National Debt amounts to 25·34 per cent. of the total expenditure, of which 22·3 per cent. weighs exclusively on the nation. Finally, we must not forget that large sums included in the budget are paid into the sinking fund at a rate which should rapidly decrease the debt; a factor which evidently must be reckoned as a compensation.

In the face of this enormous debt are we to conclude, with certain authors of repute, that when the payment of the interest on the public debt absorbs more than 40 per cent. of a nation's revenue, that nation is in the most serious situation, not far removed from bankruptcy?

Certainly the theories of these gentlemen are based upon valuable data, which are deduced from the science of finance, or taken from the actual examples of certain

nations; but it is also certain that these theories have been formulated with the mind directed toward European countries, in which population, wealth, and all the phenomena of social life are evolved in a slow and harmonious manner; but for countries like the Argentine, countries with enormous natural resources, subject to sudden increases of wealth and population, where all manifestations of progress are abrupt, such theories are not true.

Again, in order to estimate justly the extent to which this debt weighs upon the nation, we must take account of the special conditions under which this debt was created; a factor which makes international comparisons difficult. It is not enough to know only the total of the National Debt in order to comprehend the financial position of a State; for it may well happen, as in the case of Australia, that the capital of the loans forming the debt has been employed in productive work, the yield of which contributes to increase the Treasury receipts.

Neither can the amount of debt per inhabitant give us a true idea of the financial vitality of a country; for just as a given burden may crush one man, while another can bear it with ease, so, according to the physical resources of either, one nation may support a debt with ease which would utterly overcome another.*

The weight of the National Debt must be estimated by its relations with the economic system and the conditions of national development. For example, in making such an estimate with regard to the Argentine debt, we find that side by side with the increase of this debt there is a notable increase of the national wealth, which should keep all

* M. Alfred Neymarck has shown how broken a reed is any argument based upon the amount of debt per inhabitant, and how void of any scientific basis.

"We have successively passed in review the various countries of Europe, and by basing our arguments upon facts and exact figures we think we have demonstrated that in the evaluation of a nation's credit, of the price of its stocks and their rate of capitalisation, the figure 'per inhabitant' has no value and no significance. Such statistics, which are more or less used everywhere, in France and abroad, by force of habit and routine, are absolutely incorrect and incomplete; they have only one sure result: they infect the spirit of judgment of those who rely on them."—In the journal *Le Rentier*, for the 7th, 17th, and 27th of September and the 7th of October 1904.

creditors tranquil and satisfied as to the liquidation of the obligations contracted towards them on the part of the State, although these obligations might at first sight appear out of proportion to the means of the State.

If we take, as a mark of national wealth, the value of products exported, we have the following figures to go by: between 1890 and 1899 the value of the Argentine exports rose from £20,163,600 to £36,983,200. In 1903 it amounted to £44,000,000; in 1904 to £52,800,000; in 1905 to £64,400,000; in 1906 to £58,400,000; in 1907 to £59,200,000; and in 1908 to £73,200,000.

Side by side with the exportable products the revenues of the nation have also achieved an extraordinary expansion, which has enabled the Government to complete important public works, to perfect its administration, to acquire and equip the first fleet in South America, to spread primary and secondary education through its territory, and to push its civilising agencies to the utmost limits of the country.

In 1898 the ordinary gold receipts rose to £6,416,440, while in 1903 they amounted to £8,879,420, and in 1904 to £9,345,708; but in 1899 there existed additional importation duties, which are now suppressed. In 1907 the receipts in gold amounted to £12,900,000, and in 1908 £13,600,000.

The same increase is to be observed in the receipts collected in paper money. In 1898 they amounted to £4,201,495; in 1903 to £5,709,749; and in 1904 they rose to £6,086,753, although the duty on wine had been removed during the first half of the year. In 1907 these receipts amounted to £8,316,000, and in 1908 to £8,756,000; figures which represent an enormous progress.

Thus a country in which the national resources and those of the Exchequer increase in so rapid a progression, is evidently in a position to support, without much anxiety as regards the future, the burden of its National Debt, however enormous the latter might appear.

But such considerations must not, of course, incite the Administration to violate the financial principles of method and economy, nor lead it to increase the public expenditure at an unjustifiable pace, in order to meet parasitic requirements, or satisfy electoral demands. What gives rise to such

fears is that when there is need for works of a certain degree of importance, such as would give a stimulus to the material progress of the country, or at least to endow the country with new buildings and constructive works, the budget never comes to the rescue, and the end is always an issue of internal stock.

Of late years the Republic has enjoyed a pastoral and agricultural yield such as it has never seen in its economic existence. This double yield, the result of energy favoured by climate, was not only remarkable for abundance, but the prices which it commanded in the international markets were the highest that have ever been known up to the present. All would seem to indicate that in consequence of this abundance the Argentine Treasury would overflow with money; that it would be in a position to meet all the current expenses of administration, and also many of the extraordinary expenses which are demanded by a nation in process of formation for the stimulation of its material progress.

Unhappily it has not been so. The ordinary revenue, like the national production, has exhibited a marvellous elasticity: but in spite of that it has not been enough to cover the ordinary expenses.

Turning from the shadows that obscure the picture of the financial and economic situation, we may, in spite of all, conclude that investors who have placed their capital in Argentine loans may be fully reassured that the interest will be scrupulously forthcoming. Although the majority of the loans have been employed in other ways than those intended at the time of their issue, it is none the less true that by their aid certain works of national utility have been effected, which could not have been realised without such resources. To cite only two, let us recall the fact that the nation has spent £10,976,304 in the construction of railways; while the Buenos Ayres Water Supply and Drainage Works absorbed £6,530,000.

Again, as the great Argentine financier Señor Tornquist has said, we must not forget that although the country avoided a war with Chili it was only by allowing £15,000,000 to be swallowed up in ships and armaments; and this was done without recourse to the outside world for loans, after

not less than £4,000,000 had been absorbed by military preparations in the interior. These sums, representing nearly a quarter of the present debt, were spent to avoid a fratricidal war, which would have cost us ten times as dearly.

Apart from the fruitful application of loans, the creditors of the Argentine must also consider the sacrifices made by various Governments to defend and uphold the financial credit of the Republic. The service of the first loan contracted by the nation—that of 1824—was, as we know, suspended during the melancholy period of tyranny and national dissolution; but hardly was the Argentine family reunited, hardly was a regular Government established, when the latter hastened to resume the liquidation of the liabilities which had been contracted. President Avellaneda, in a solemn moment, has eloquently recalled the facts:—

“There is a new nation in the process of birth, possessed of the sentiment of its own greatness; either by a puerile hallucination or by the revelation of its destiny. It has barely formed a Government; but already it imagines vast schemes; it asks and obtains money from London; for capital, although she is represented as hard and having no bowels of compassion, knows often a sudden tenderness for dreams.

“But the dreams of this people are quickly destroyed: then follows anarchy, with its long and lamentable lapses of self-knowledge: anarchy, into which young societies fall, by the very weakness of their native elements; until at length they are seized by the iron hands of tyranny, as was indeed the fate of Argentina. And a tyranny that endured for twenty years! Wretched nation! Unhappy Argentina! Her voice was all but dumb, failing in the depths of that abyss! . . .

“The bonds of that debt were quoted on the London Exchange; but in time they were quoted no more, for they had at length lost all value; even their name was erased. A day came, however, when the children of Argentina’s creditors went to search for their bonds among forgotten papers; and the bonds were redeemed. For many that was a day of legitimate surprise; the bearers had offered their paper to their debtors at any price; but now they were told that they would receive its written value. It was enough for them

that they should be paid in future; but they were told that even the arrears of interest and amortisation should be arranged by means of new stock, which was known as Deferred Bonds.

“When, among its assets, a nation possesses such a trait in its life as this—a trait unique in the financial history of the nations—it has the right to hold its head erect, affirming its honour and its credit.”

Since that date, and during thirty-six years, the country scrupulously paid the interest on its debt, until the disastrous year of 1890, when, as a result of the financial and political crisis, the most violent the country had ever suffered, the payment of the foreign debt began to be a matter of serious consideration for the Administration. Many schemes were proposed to help the State tide over that difficult time; but none of them included the repudiation of the debt. The Government then at the head of affairs accepted the most onerous of these schemes, because it was that which was most to the advantage of its creditors.

The arrangement then decided on, known as the *Morituri* loan, or Morgan loan, has been the subject of severe criticism; but one thing was not and will not be debated, namely, the noble and patriotic intention which inspired the authors of this transaction, and resolved them to safeguard the worthy traditions of Argentine credit. By respecting their foreign liabilities they served the truest interests of their country, and respected also the spirit of the Constitution, which holds that credit, and foreign credit in particular, should be the great constitutional resource, placed in the hands of Governments “for the urgent needs of the nation, or for undertakings of national ability.”

CHAPTER III

THE DOUBLE CURRENCY

The persistence of the double currency—The history of paper money—The origins of the premium on gold, and its almost continual increase—The year 1890 and the depreciation of the currency—The causes of this depreciation; abuses in the issue of paper, caused by a bad financial and administrative policy.

Remedies suggested—Rosa's law fixing the value of paper money and establishing a *Caisse de Conversion*—Opposition to this law—Its beneficent effect upon agriculture and stock-raising, which had especial need of a stable medium of exchange—Reserve fund created with a view to converting paper money; its vicissitudes in the past and its present constitution—The present monetary situation.

IN the financial history of the nations there are few examples of countries in which the phenomenon of two standards of currency has manifested itself so persistently and for so long a period as in the Argentine Republic. This is one of the gloomiest pages of its past, on which are recorded all the errors of its rulers, all the abuses of speculation, and all the faults of administration whose cost the present generation has been paying since the opening of the twentieth century.

Since the 27th of May 1820, the date on which the Junta of Representatives authorised a gradual issue of paper money, and another issue of redeemable and endorsable notes, the latter to be applied to the payment of debts contracted in the name of all the Provinces during the previous Administrations; since 1820, we were saying, until the present time, there have been few years indeed during which the Republic has not been under the empire of a double currency.*

Our paper money, says an Argentine publicist, originated in an issue of 290,000 piastres by the *Banque d'Escompte*, created in virtue of a law of the Province of Buenos Ayres, dated the

* In 1820 the issue of paper money was 40,000 piastres per month, and that of the notes was the same.

22nd of June 1822. Four years later, when on the 20th of January 1826 the Discount Bank was transformed into the National Bank, the issue amounted to \$2,694,856. When the National Bank was in turn converted into the Mint, eleven years later—that is, on the 1st of January 1837—the issue had already amounted to \$15,283,540. Seventeen years later, when the Mint was transformed into the Provincial Bank (1st January 1854), the issue amounted to \$203,915,206. During the twenty-seven years which elapsed between the creation of this bank and the passing of the monetary law of 1881, the successive issues of National and Provincial Governments had increased the mass of inconvertible paper to the sum of \$882,071,156.

It was then, with gold at 2500 per cent., that the Government began to recall all this mass of paper, replacing it by another issue, of which the one piastre notes exchanged against 25, or a piastre's worth of the issue which was destined to disappear.

This operation, which at a blow reduced the paper currency to a twenty-fifth part of its original amount, also brought gold to par.*

In 1861 the depreciation of paper touched its lowest point: 2483 piastre notes were given for \$100 in gold. The premium was thus 2383 per cent.

But the reader must not take this to be the only surprise that the history of the double standard has in store; others, still greater, remain to be told. In 1862 the depreciation was even lower, the premium reaching 2456 per cent., and 2556 piastre notes being given for \$100 in gold.

The premium continued to rule high until 1867, being 2569 per cent. in 1863; 2784 per cent. in 1864, 2597 per cent. in 1865, and 2406 per cent. in 1866.

We stated just now that the Republic, during a long period of history, never escaped from the inconveniences of depreciated paper save practically on two occasions, which were unhappily of only too short a duration. The first occasion was when Adolfo Alsina was Governor of the Province of Buenos Ayres. The "Bureau of Bank

* See *Las vicisitudes de nuestra moneda fiduciaria en los últimos 65 años* (1826-1890), by F. Latzina.

Exchanges" was established, its mission being to exchange one piastre in gold against 25 in paper, and *vice versa*. This Bureau was in operation from February 1867 to May 1876, the date of the suspension of metallic conversion.

After this period the value of paper money declined anew. In May 1876 the golden coin was worth 28 piastre notes; in June, 30; in July, 33; in December, 29.

In 1877 the average value of a golden piastre was 29 piastre notes; that is, 100 piastres in gold represented 2900 notes; in 1878 the ratio was 3187; in 1879, 3220; in 1880 3055; in 1881, 2706.

It was at this time that the second exception occurred, marking another check to the constant depreciation of paper.

In November 1881, under the Presidency of General Roca, Señor Romero being Minister of Finance, a law was promulgated establishing a bimetallic standard in the Argentine. The monetary unit was to be the piastre of gold or of silver; the first weighing 24.9 grains Troy, and the second 383.8 grains, both being alloys containing nine-tenths of the pure metal. This law also established the metallic conversion of depreciated notes.

This operation was a beneficent advance in the economic and financial system of the country; for by establishing metallic conversion it gave stability to the legal instrument of monetary transactions, and also contributed to establish an enviable state of affairs during the years 1883 and 1884, which gave rise to the rosiest hopes for the future. But by an irony of fate the very Government which had suppressed the double standard found itself forced to re-establish it in January 1885. It should be remarked that at this time Señor Romero was no longer Minister of Finance.

The country being once more abandoned to the miserable system of inconvertibility, the depreciation of paper began its downward progress, recalling the too celebrated case of the *assignats*, a case one would have thought impossible of recurrence in time of peace and among a people that had suffered no catastrophe for many years.

In June 1885 the premium rose to 50 per cent.; in 1886, it was 39 per cent.; in 1887, 35 per cent.; in July 1888

53 per cent., finally, in 1889, it proceeded by leaps and bounds; 50 per cent. in January, it was 53 per cent. a month later; in March it was 55 per cent., rising to 120 per cent. in September and October, and 130 per cent. in November and December, despite the empirical measures of alleviation adopted, amid violent disputes, by the Minister of Finance.

Thus the Republic entered on the year 1890; a year of grave political and financial disaster. On the one hand was the revolutionary movement, prepared by the connivance of part of the army and the navy; on the other hand, the crushing depreciation of paper, ending in an absolute catastrophe which affected both public and private fortunes.

In the month of April of that year the premium increased to 215 per cent.; that is, 100 piastres in gold were equivalent to 315 in paper. In July, when the revolution broke out, it stood at 217 per cent. In November the Government which replaced that which had been attacked by the insurgents prohibited the quotation of gold. Nevertheless, the premium rose to 225 per cent. and remained at that figure until December.

We must remember that, in spite of the downfall of paper, the economic vitality of the Republic had suffered no serious blow; no war had broken out, no international complication had occurred; there was, in short, no organic cause to which the premium could be attributed. Certainly, the commercial balance was unfavourable; but that phenomenon has not the significance generally attributed to it. The true causes of this crushing state of affairs were exclusively of a financial and administrative nature. It was the inevitable result of the manner in which paper money had been issued to serve the needs of the Government, and to feed the furnace of speculation. One cannot forget that at the end of 1886 the total issue of paper amounted to \$80,251,380; that in less than two years it was nearly doubled, amounting to \$147,503,911; while in 1890 the paper currency reached the figure of \$196,882,500. But this situation, painful as it was, could not be suddenly changed for the better; other causes of a like nature were about to intensify it. The new President, who came into power after the revolutionary outbreak found himself forced, by various circumstances,

to increase the existing circulation of paper. The new issues amounted to \$150,000,000.

As was only to be expected, such an issue on the back of the existing paper currency, which exceeded \$196,000,000, could only produce a disastrous fall in paper. Its depreciation touched the lowest point in the history of the Argentine, or of any other country during the second half of the nineteenth century; the blackboard of the Stock Exchange showed an exchange value of 464 per cent. or a premium of 364 per cent., in the third week of October 1891. This was the record of monetary depreciation.

After 1892 the monthly quotation of gold, in relation to paper, oscillated between 359 and 290 in 1893; 433 and 307 in 1894; 377 and 311 in 1895; 352 and 266 in 1896; 317 and 274 in 1897.

We see from these figures that these conditions are abnormal, extraordinary; and yet, owing to their long duration, they are almost part of the normal life of the Republic. It is therefore a matter of interest to study the causes of such phenomena, in order to decide whether they are inherent in the period of transformation through which the country is passing, in which case it would be idle to attempt any reform at present, or whether they can be controlled or checked by the employment of means counselled by science and confirmed by experience.

According to the judgment of certain persons who have devoted themselves to the study of economic questions, the causes which, in the Republic, produce the double standard, are of a permanent character, proper to the period of formation through which the country is passing. It is even said that so long as Argentina has not a capital of her own with which to float herself in the full tide of affairs—such a capital as is the result of years or centuries of prosperity—so long will she be a debtor among the nations, and the system of the double currency must continue.

We ourselves are of opinion that the causes which have produced, and now maintain the inconversion of the fiduciary currency, are of a very different character to those implied by the above judgment; and that if we consider the economic state of the country at the moment when the

double standard was established, we shall find that it was in no way responsible for the phenomenon of depreciated currency. The true cause is the necessities of the Government; determined either by factors beyond the range of debate, such, for example, as the eventuality of a foreign war, or by less justifiable reasons, such as deficits in the budget and reckless issues of paper. In both cases the printing-presses of the official banks have been set to work, in order to tide the Government over a difficult passage, at the risk of vitiating the instrument of national credit by the efflux of inconvertible paper.

Those interested should read the history of the first issues, exposed in a masterly manner by Señor Augustin de Vedia, in his work on the National Bank; they will see that the excessive issue of notes cannot be explained or justified by the period of economic formation which the country has passed through. We must search for other causes in order to explain this long and unfortunate period of inconversion, which lasted, with a few years' respite, from 1820 down to 1905.

What, for example, were the reasons which determined the premium on gold in 1885, under the first Presidency of General Roca? Was it, by any chance, that any economic calamity fell upon the country? Were the harvests lost? or was there a foreign war, or even one of those revolutionary risings so common among the South American nations? Did the germs of some epidemic invade the country, decimating the population by disease and poverty? Was there any violent and ruinous fall in the market prices of Argentine products?

Nothing of the kind befell. The Government itself, in the message in which it solicited the ratification of the double standard, that "the national production, the valuation and the degree of culture of the soil, had consolidated the national credit." The crops were abundant; and their prices, in foreign markets, were more than fair. The Republic was at peace, at home and abroad; thus realising one of the dreams of the paternal administration which directed its destinies. As for the public health, it suffered no perceptible eclipse in all the Argentine Territory.

It has also been said that the commercial balances were unfavourable to the Argentine: a country at once a debtor and a centre of immigration. And it has been asserted, too, that the Republic suffered from a sudden increase of growth, without having behind it any reserves of accumulated capital.

The affirmation that the depreciation of the currency, and in consequence the establishment of a double standard, arose from unfavourable commercial balances, has no scientific basis and is not supported by precise demonstration.

"None of the countries which have suffered the misfortune of a depreciated currency have reached that condition purely on account of adverse balances," as a Spanish economist, Señor Edouardo Sans y Escartin, has said with justice. All countries have suffered from this evil, on account of monetary changes, and the Argentine is only the latest example. France towards the end of the eighteenth century, England from 1797 to 1821, Austria and Russia since the beginning of the last century, the United States from 1862 to 1878, Italy since 1875, Paraguay since 1870, and the Hispano-American Republics for the last twenty-five years: all these countries have suffered from monetary perturbations, some through the abuse of paper money or the excess of the fiduciary circulation, others through the variations of the relation of gold to silver. In none of these countries did the crisis take the form of the consequence of unfavourable commercial balances.

We find, in fact, that it is not the case that economic causes, resulting either from the formative period the country has traversed, or from its lack of accumulated capital, have contributed and are still contributing in the Argentine Republic to prolong the system of inconversion; the causes are exclusively financial and administrative, as we have already maintained.*

Having glanced at the circumstances which have determined the state of monetary inconversion which has afflicted the country ever since it became a nation, we must now

* The famous Italian economist, Eteocle Lorini, maintained in a book which he published in 1902 (*La Repubblica Argentina e i suoi maggiori problemi di Economia e di Finanza*), that the Republic has never possessed money, but only a simple legal tender or instrument of exchange.

examine the remedies which the public powers have suggested in the hope of emerging from this detestable state of affairs.

Every presidency has declared its firm intention of redeeming or reducing the paper currency in circulation; but none of them has obtained results that we can really regard as final.

Of all the attempts to terminate the condition of inconvertibility, to give stability to the currency, and to prepare, in a more or less proximate future, for the establishment of a sane monetary system, the most earnest and scientific, and that which had the happiest results, was that which emanated from the proposal presented to Congress in August 1899 by the ex-Minister of Finance, Señor José-Maria Rosa, which has since then become law: the present law of the conversion of the fiduciary currency.

The scheme of reform of this eminent statesman was worked out on the following basis:—

1. Immediately to fix the rate at which the future conversion would be effected, in conformity with the actual and contemporary value of the currency.

The fixing of a definite rate was necessary in order to consolidate the then existing state of affairs, to suppress the premium, and to give transactions a positive basis, without indefinitely retarding the possibility of conversion; and also to prepare for the liquidation of old issues, and to deliver the country to some extent from the gigantic burden of its issues.

2. To form a large metallic fund to guarantee this conversion and to make it possible for money to become stable during this period.
3. To maintain a fixed standard by these two means:—

(a) The creation, in the *Caisse de Conversion*, of a bureau operating as an automatic regulator, in conformity with the tightness or slackness of money, and according to the necessities of the market; thus making elastic the paper currency, the circulation of which might increase

or decrease, on account of the quantity of gold given out in exchange.

- (b) The intervention of the Bank of the Nation in matters of international exchanges.

It was on these lines that the Minister drew up, and Congress adopted, a law which enacted that the nation should convert, during a fixed period, at a convenient time, the whole fiduciary circulation into Argentine gold coinage, at the rate of one paper piastre for 44 centavos of a gold piastre. This same law ordered the formation of a Conversion Fund, with resources which it enumerated; and finally it established in the *Caisse de Conversion* a bureau for the exchange of paper into gold and *vice versa* to all who might apply, at the rate of one paper piastre for 44 of a gold piastre.

Few laws have been so beneficial as this law of monetary conversion was to the Argentine Republic. The present prosperous economic conditions of the country are the work of this law; it constitutes the glory of Roca's Government, which gave it birth and enjoyed its first fruits.

Yet we must emphasise the fact that this law, so beneficial to the public, was at the outset repudiated not only by the President, who, to avoid subscribing to it, forced his Minister to send in his resignation, but also by the principal organs of the press, at the head of which was that important journal *La Nacion*, and again by the Professor of Finance at the University—M. Terry—who was all for conversion on a sliding scale; that is, for the worst method conceivable, as by maintaining the condition of instability he would have adjourned the question instead of solving it. But thanks to the rare energy and the intelligent propaganda of Señor Rosa, the sole author of the law, effectually supported by Senator Pellegrini and Señor Tornquist, this important step was accomplished, despite all the obstacles which barred the way.

In a very short time this law, so strongly opposed before its birth, produced marvellously beneficial effects upon the economic life of the Republic. It gave stability to the currency; that is, it endowed the Argentine with one of the

greatest blessings a commercial and productive nation can enjoy.

To be convinced of this fact it is enough to run the eye over the column of metallic quotations on the Exchange, published in the "Statistical Annual of the City of Buenos Ayres."*

This law has killed speculation on exchange values, which before it was passed had assumed scandalous proportions, and went far to developing throughout the country that passion for gambling which is even now a corroding cancer at the heart of the young Republic.†

This law also provided for the formation of a Conversion Fund, which was a powerful factor—*si vis pacem para bellum*—in the pacific solution of the old frontier dispute with Chili. This fund amounts to-day to £5,100,000 deposited in the Bank of the Nation, and would, without this far-sighted law, have been swallowed up in the whirlpool of administrative expenses.

Lastly, the law of monetary conversion has been the salvation of agriculture and stock-raising, the two chief sources of national wealth, by preventing the too rapid change in the value of paper, which is a result that deserves to be considered with attention. The law was promulgated at a time when a large harvest was expected, and when, from that very cause, the depreciation of paper violently increased, the value falling from 278 in August 1898 to 206 in December of the same year. It is certain that at this rate the depreciation would finally have touched 150, to the greater profit of the speculators.

What would have happened had the monetary situation

* *Annuaire statistique de la Ville de Buenos Ayres*.—The transactions in metallic values effected on the Buenos Ayres Exchange in 1899 (before the passing of the law), amounted in value to £109,817,116, or \$1,234,579,370 paper, while in 1908 there were none. Any one wishing to exchange gold for paper or paper for gold to-day, goes to the *Caisse de Conversion*, where the exchange is effected without any charge.

† As the *Annuaire statistique* declares, in the course of the year 1908 no less than £8,160,000 changed hands over the sale and purchase of lottery tickets and betting on racehorses. This is an evil that may grow into a national calamity if nothing is done to arrest it; and we see with pleasure that the Government has stated its intention of presenting to Congress the draft of a law prohibiting lotteries.

altered so rapidly? The Argentine agriculturalist or stock-raiser, having paid all the expenses of production with gold at about 300 per cent., would have been forced, by reason of the rapid depreciation of paper, to sell his products at a price which would no longer compensate him for his increased expenditure. This would inevitably have ruined the producer—that is, the principal artisan of the national fortune. Far from opening up new lands with his plough-share, as hitherto had always been the case, he would have abandoned the land already under cultivation.

We need not describe the disaster which would have overcome the country under such conditions as these: the loss of credit both at home and abroad. The stream of immigration would have been suspended; emigration, on the contrary, would have increased, taking the form of a veritable exodus, even of a flight; and each impoverished and disillusioned emigrant, as he left the Argentine, would have proclaimed that the country was ruined. As a result the Argentine would have been for years partially depopulated, or at least deprived of the new recruits which immigration brings in, and of whom it has such need in order to realise the value of more virgin territory.

Worse still: once the harvest was sold, at prices which could no longer be calculated on the basis of the cost, gold, now freed from all restraint, like a balloon whose mooring is broken, would have resumed its upward journey. The melancholy spectacle of 1890 and 1891 would have been repeated; gold would have risen by leaps and bounds, in contradictory and incalculable rushes, finally to reach the limits that mean bankruptcy.*

Such are the disastrous results which would have ensued had not the law of monetary conversion come just in time to restrain the rapid depreciation of paper, and to give money the stability it must possess if it is to be the faithful

* We remember that gold, which on the 9th of August 1890 stood at 35 per cent. when a new Government came into power, had risen to 425 per cent. by May 1891, and in October of the same year touched 464 per cent.; the highest premium ever known in the long history of the double standard during the last half of the nineteenth century. In the United States during the war of secession, the premium on gold rose to 286 per cent. only (on July the 4th 1864).

and precise instrument of commercial transactions, the common measure of all exchanges. Such were the beneficent results which followed shortly upon the operation of the law; and we can only regret that it has not always been understood and applied with sufficient force by those who were responsible for putting it into practice. The Governments which have followed since then have not always followed the ideal of economy and scrupulous administration which should ensure the success of this important reform. None the less, the Conversion Fund amounts to-day to £5,100,000.

According to the figures for October 1909 the monetary situation of the country may be summed up as follows:—

The total of notes in circulation amounts to \$686,291,704 paper, equivalent to £60,393,670. The Conversion Fund of £5,100,000 in gold, added to £34,752,058 on deposit in the *Caisse de Conversion* and to the £14,073,515 deposited in the various banks of the capital, forms a total of £53,925,573. It follows from these eloquent figures that the fiduciary circulation, notes, nickel, and copper, is guaranteed in Argentina by an actual value of 65·9 per cent. of its total; the notes alone are guaranteed by 89 per cent. of gold.

Unquiet spirits from time to time, including the enemies of monetary reform, announce their opinion in the press that this law should be modified. Quite lately the well-known journal *La Nacion*, which is distinguished by the constancy and fervour with which it attacks this beneficent measure, has opened its columns to an enquiry, in order to obtain the opinion of the public, or at least of persons competent in such matters. Happily common-sense triumphed; the law remains intact, continuing to benefit the whole national economy.

CHAPTER IV

THE CAISSE DE CONVERSION

The principles on which the establishment of this institution is based—The necessity of a rapid redemption of fiduciary money—The imperfect success of this programme—New issues of notes—New attributes of the *Caisse* dating from 1899—The exchange of paper for gold and *vice versa*—The development of this system of exchange—The authority attaching to the *Caisse*.

AMONG the official institutions which are closely connected with the issue and redemption of paper money, the *Caisse de Conversion* demands a special place, on account of the important part which it plays in the financial life of the Republic. This establishment was created in 1890, at a moment particularly critical for the credit of the country, when the terrible crisis occurred which ruined several banks and resulted in a depreciation of the fiduciary currency which exceeded all expectation. The Government which presided over the destinies of the country understood that it was necessary, in order to ameliorate such a situation, to put some means into practice which should ensure a more gradual movement of paper, its reduction in no matter what form, and its future convertibility within a short and definite period, as the message declared which accompanied the draft of the law submitted to Congress.

In obedience to these excellent principles of financial and banking policy, it proposed the creation of a Junta or a special Directorate, "independent in its action, and uniting the necessary faculties for the recovery, administration, and application of the elements that must be confided to it for the effectual accomplishment of its important mission."

An "important mission" it was indeed that was confided to the Junta by law; for this body was to see the gradual conversion and redemption of paper money, supervise the strict execution of all the laws relating to paper money, and oversee all issues of the same.

With the object of effecting, sooner or later, the actual and effective conversion of paper money, the law created a "Conversion Fund," composed of the metallic reserves of the guaranteed banks, the sums for which these same banks would be debtors on account of the value of stock bought as guarantees, the public funds issued to guarantee the bank issues, and all the sums which, in virtue of other legislative enactments, might be destined to the conversion of bank paper, and especially those proceeding from economies made out of the general budgets.

The Executive attached a special significance to this fund, proposing to use it to great advantage in the future; if the succeeding Governments had the wisdom to maintain the elements indispensable to the regular circulation of the national currency.

These details prove that the fundamental idea at the bottom of the creation of the *Caisse de Conversion* was that of effecting, by its help, and by utilising the resources with which it was endowed, a rapid redemption of paper money. This intention, moreover, was solemnly affirmed at home and abroad when the contract was signed with the English bankers for the issue in 1891 of the loan known as the "Funding Loan," amounting to £15,000,000; in virtue of which loan the Government undertook to withdraw from circulation, during each of the years 1891, 1892, and 1893, \$15,000,000 in notes, or \$45,000,000 in the three years.

Unhappily the Government's good intentions had no practical issue; the *Caisse de Conversion*, from the first moments of its existence, found it impossible to fulfil its object.

So the proposal to withdraw \$15,000,000 a year went no further than a beautiful ideal; it never took definite shape as a reality. In 1891 \$1,696,676 in paper were burned; they came from an additional customs duty on certain imports. In 1892 \$1,463,424, having the same origin, were disposed of in the same way. Besides this a sum of \$3,511,600, provided by the payments made by the National Bank and the Bank of the Province of Buenos Ayres on account of \$35,116,000 lent them by the Government in order to help them out of a greatly embarrassed condition,

was also burned. The balance-sheet of receipts and expenditures drawn up every year by the *Comptabilité Générale* records only \$1,248,032 as burned in 1891, and \$3,586,255 in 1892, or \$4,834,287 in two years; a very different sum to the 30 millions which the Government had promised to withdraw.

Thus the *Caisse de Conversion*, from which the Minister of Finance had hoped so much, failed at its birth, and as an institution gave no positive results. So it was not necessary, as the Minister of Finance, Señor V. F. Lopez, pleasantly remarked, to await the appreciation of future Governments.

But this is not all; instead of redeeming the promised quantities of fiduciary money, the Government which was then directing the destinies of the country—we must believe that it was compelled by circumstances, which are so often more potent than the human will—the Government actually found itself forced to increase the total of paper in circulation by emitting, for various reasons, further issues of notes.

Dominated by circumstances, it issued in 1890 \$35,116,000, in order to legalise the excess of an issue delivered to the National Bank and the Bank of the Province of Buenos Ayres. In the course of the same year it created an issue of 60 millions more, in order to furnish the National Bank with 25 millions, the National Mortgage Bank with 25 millions, and the City of Buenos Ayres with 10 millions. In 1891 it issued 50 millions in order to found the Bank of the Argentine Nation, and finally 5 millions more for the Mortgage Bank. In short, urged by necessity, the Government created \$150,000,000 of paper in two years, which on the top of a previous issue of \$161,766,590 in paper was naturally followed by disastrous results.

The Government which took charge of the administration in 1892 also manifested, in its programme, its firm intention of increasing the value of paper money by its gradual redemption; an operation which would, of course, be the duty of the *Caisse de Conversion*. To this end it included the necessary sums in the budget, and \$865,426 were burned in 1893 and \$8,000,394 in 1894. But the results obtained by this measure were far from responding to the hopes which were founded upon it; although the Government religiously

and with much solemnity, burned on the 15th of each month a determined sum of paper money—usually half a million—the value of paper, far from rising, fell further and further below that of gold.

The Government finally saw that its plan was useless; and hastened to explain itself by the mouth of its Minister of Finance, who declared that “the executive power recognises that the withdrawal of eight millions of piastres per annum cannot fundamentally alter the price of our paper; but what it does affirm is that this quantity will be sufficient, provided the production of the country increases, provided that the exports exceed the imports; that is to say, provided that the international balances are in favour of the Republic.”

We may say in passing that these two desired factors were realised; but not the expected advantage, for the Government again made the mistake of issuing 15 millions of internal stock, bearing interest (£1,320,000), while at the same time it extinguished another debt, also domestic, which did not bear interest.

All these details prove in a conclusive fashion that the original and organic functions of the *Caisse de Conversion* were inverted from the time of its creation; converting that institution into a factor of depression in all that concerned the paper currency, instead of being the instrument of increasing its value.

After this date the *Caisse* operated as a secondary and harmless department of the public Administration; leading an almost forgotten existence, until the year 1899, when the law of monetary conversion was passed, which entrusted it with two missions of great importance, which were destined to exercise a beneficent influence upon the fiduciary circulation, and therefore upon the economic life of the Republic.

One of these two missions had as its object the establishment of an office for the exchange of paper into gold and *vice versa*, at the rate of 2·2727 piastres in paper for 1 piastre in gold. The other consisted in forming a Conversion Fund, to which more or less important resources were assigned. This fund amounted in 1902 to £2,400,000 in gold, but at a moment when an international complication was believed

to be imminent this sum was placed at the disposal of the Government by authorisation of Congress.

The Government eventually returned £2,000,000 of this sum, and since then the fund has constantly increased, amounting in 1907 to £5,100,000, as we stated when speaking, in the passages relating to the issues of paper money affected by the *Caisse de Conversion*, of the results of the application of this new law.

The law to which we are referring was put into execution on the 9th of December 1899. On that day the first transaction under the new law was effected; the *Caisse* received 100 piastres in gold, in exchange for which it returned the equivalent in notes, in the proportion of 44 centavos of gold to a piastre note. The balance drawn on the 31st of December showed the existence of £292·6 in gold. At this same date the fiduciary currency in circulation amounted in all to \$295,149,735.

Let us now look into the operations of the *Caisse de Conversion* after this date.

During the year 1900 \$18,398,449 (£3,679,690) in gold was received; but as this sum was eventually withdrawn the fiduciary circulation soon reached its former figure.

In 1901 there was nothing done; that is, the *Caisse* received no gold.

In 1902 scarcely anything was done; £4209 was received, and £3636 was paid out, leaving a balance of £573. The operations for 1902 began in October, during which month the *Caisse* received £68, 12s.; it paid out £67, 12s., so that £1 remained. In November the takings increased to £1497, and the outgoings were £1466, leaving a balance of £31. In December £2639 were taken and £2102 issued, leaving a balance of £537.

Only in 1903 did the operations of the *Caisse de Conversion* amount to anything. The two principal causes of this state of affairs were, firstly the settlement of the frontier dispute with Chili, a question which had caused serious alarm, and had resulted in enormous official expenses during the few previous years; and secondly the size of the commercial balances. Bearing this in mind, it is not surprising that the amount of gold in the *Caisse de Conversion*, and, con-

sequently the issues of paper money, should have commenced to increase and have continued to do so until they reached the proportions which they have since attained.

In 1903 £9,208,284 in gold was taken, and £1,576,625 paid out; leaving £7,648,229. The busiest months were April, when £2,519,048 was taken, and March, when the takings were £1,738,395. The largest outgoings were in March and July, amounting respectively to £239,133 and £222,104.

In succeeding years the metallic reserve of the *Caisse de Conversion* has continually increased, thanks to the favourable sense of the economic balances of the nation's trade, and the capital which has entered the Republic, to be employed in the establishment of new industries, or the creation of railways, tramways, etc.

At the time of writing the metallic reserve of the *Caisse de Conversion* has lately increased to £34,752,058, which, added to the £5,100,000 of the Conversion Fund, gives a total of £39,852,058. The proportion of these reserves to the paper currency in circulation is to-day 65·9 per cent.

According to the law the increase of the metallic balance in the *Caisse de Conversion* has inevitably caused, as a natural consequence, the parallel increase of the issues of notes, nickel, and silver, of which the amount in circulation increased to \$688,177,998 on 31st October 1909, or \$393,028,267 more than on 31st December 1899, the year in which the law of monetary conversion was voted, and in which the same circulation amounted to \$295,149,731.

The rapidity with which the emission of paper has increased has caused certain journals, and especially those which have been prominent in attacking the law of monetary conversion (whose beneficial effects they were yet powerless to deny) to raise cries of alarm, thinking to see in this increase a future economic peril, or the seeds of a dangerous crisis, due to the inflation which, in their judgment, is produced by such issues. But it is easy to prove that these alarms are not justified from the moment when such issues are guaranteed by a corresponding deposit of metallic currency in the *Caisse de Conversion*. Moreover, a very little reflection will show that one cannot help admitting that this gold,

being the product of the ever-increasing economic balances of the country, will affect the monetary situation equally if instead of being in reserve in the *Caisse de Conversion* it is to be found in the strong-rooms of private banks.

As we may see from these data, the *Caisse de Conversion* has completely changed its rôle. It has abandoned its original function, which was confided to it by the law; namely, the redemption of the fiduciary currency and the re-establishment of the monetary equilibrium when destroyed by excessive issues of paper. To-day this institution is merely a purely mechanical department of the Administration, and its functions might be fulfilled, at any rate theoretically, by other administrative departments which are closely connected with it.

CHAPTER V

THE BALANCE-SHEET OF THE ARGENTINE ACCORDING TO THE INVENTORY OF SECURITIES.

THE INVENTORY OF MOVABLE PROPERTY OR SECURITIES—The capital represented by movable properties, stocks, bonds, shares, etc., is the only kind of capital which lends itself to statistics—The great groups of movable properties : National Funds, Railway Shares, Insurance Companies, Foreign Banks, Mortgage Companies. and agricultural and industrial undertakings.

The nominal amount of capital represented by movable values—Table of the annual revenues of the same, and the sinking fund.—Division of this revenue among the different countries having capital invested in the Argentine.

English capital—The importance of English investments in all branches of Argentine activity—The benefits of a reaction in favour of Argentine capital—French capital; its small value compared to English capital—German capital and its rapid increase—Approximate valuation of that portion of revenue remaining in the Argentine, and of that which goes to the various nations having capital invested in the country.

THE BALANCE-SHEET—The assets are principally composed of exportation values; the liabilities, the value of imports—The revenue of investments exported to foreign countries, and the total of the sums expended by the Argentine abroad—Table giving a summarised Balance-sheet and the balance in favour of the Argentine—International exchanges and the importation of gold confirm this favourable situation—Argentine capital will presently play a more important part in the country as compared with foreign capital.

THE INVENTORY OF MOVABLE VALUES.

THE time has come to sum up our conclusions, and we cannot do better than attempt to present the figures of the movements of the capital invested in the Argentine, and by stating, as far as possible, its yield. We have already had occasion to declare that Europe has not turned her attention to the young South American Republic for sentimental reasons, nor on account of the beauty of her political institutions nor the splendour of her landscapes. What interests

the general public is the extraction of the riches of the Argentine soil; the economic and industrial expansion of the country, and its fitness as a field for investment and original enterprise.

To respond to this mental attitude we have thought it proper to undertake a dry and impartial inquiry into the value of the capital invested in the Argentine, and the total of its yield. Capital represented by movable values is the only factor which has in some sense an official existence which is amenable to control; it lends itself to statistics sufficiently precise to allow of our estimating, from this point of view, the wealth of a country; and it is consequently in this direction that we may search for a standard with which to compare the favourable estimates expressed in our preceding chapters on the subject of the development and prosperity of the Argentine Republic.

This inventory will lead us to other data, which are equally instructive. In reviewing the movable values and in estimating their yield we shall at the same time examine into the general movement of foreign capital and its earnings, so that we shall be able approximately to state the amount and the profits of the capital invested by the various European nations which have dealt with this country.

By the aid of these statistics we shall finally see the situation of the Argentine, which the results of its foreign trade have shown us only imperfectly, in its true light. Although the country has an extremely favourable commercial balance, which in 1908 was not less than £24,000,000, this sum has to support enormous charges for the payment of interest on loans placed abroad: the dividends of railway companies, of banking houses, of all manner of land companies, of commercial and industrial companies, whose shareholders are abroad, etc. etc. These are the sums we are trying to determine, in order to draw up as exactly as possible the balance-sheet of the Argentine.

This chapter will therefore be devoted to estimating on the one hand what the country owes to foreign capital, and on the other hand what profit foreign capital draws from its investment in the Argentine. It is to some extent the current

account of Europe and the Argentine that we wish to present, taking as our basis the movable values, which are the only serious data upon which we can base our inquiry.*

The nominal total of Argentine movable values subscribed up to the 21st December 1908 was £474,396,935 (in gold), of which sum £219,513,399 represents shares, £104,502,163 bonds, and £150,381,572 the public debt of the Nation, the Provinces, the municipalities, the capital of State railways, and the capital of the Bank of the Nation.

If we compare these figures with the inventory of the movable values existing at the end of December 1904, we shall find an increase of £157,173,555. But if we take account of the fact that in the first amount the cedulas of the Province of Buenos Ayres figure to the value of £15,400,000, while in the second they amount to £10,400,000 only (the amount of shares admitted to conversion by the Government), we see that the difference is considerably greater.

This increase does not arise exclusively from the new shares issued by companies created during the last two years; a large proportion is due to existing companies, which have at last decided to furnish the information demanded in view of this new inventory. But a certain number of companies still remain outside the inventory, whose stock would increase the total by 5 or 6 million pounds.

Here is the list of the stock in circulation on the 31st December 1908:

* In this book we make use of the figures which Señor Alberto Martínez communicated to the International Statistical Congress, held in Paris in July 1909.

SHARES, SECURITIES, ETC.		Shares.	Debentures.	Bonds.	Totals.
External National Debt	.. ... (approximate values)	—	—	£62,892,428	£62,892,428
Internal National Debt	... ..	—	—	16,839,341	16,839,341
External Debt of the Province of Buenos Ayres	... ..	—	—	11,289,600	11,289,600
Internal	.. ..	—	—	5,369,760	5,369,760
.. ..	.. .. Santa Fé	—	—	1,109,074	1,109,074
.. ..	.. .. Entre Rios	—	—	345,351	345,351
.. ..	.. .. Tucuman	—	—	195,765	195,765
Municipal Debt of the City of Buenos Ayres	... ..	—	—	5,078,900	5,078,900
.. ..	.. .. Rosario	—	—	1,850,000	1,850,000
.. ..	.. .. Córdoba	—	—	780,000	780,000
.. ..	.. .. Santa Fé	—	—	236,000	236,000
.. ..	.. .. Bahia Blanca	—	—	110,000	110,000
National Mortgage Cedulas	... ..	—	—	14,779,805	14,779,805
Bank of the Argentine Nation	... ..	—	—	9,697,947	9,697,947
State Railways	... ..	—	—	20,000,000	20,000,000
Private Railway Companies	... ..	£101,587,932	£76,735,107	—	178,323,039
Tramway Companies	... ..	14,158,644	7,230,981	—	21,388,625
National Bank of the Capital	... ..	16,145,653	289,044	—	16,434,697
Mortgage and Agricultural Loan Companies	... ..	8,865,866	7,788,378	—	16,654,244

Gas and Electric Lighting Companies	...	...	...	8,122,166	3,455,199	—	11,577,365
Harbours, Docks and Quays	...	...	...	5,276,358	5,096,521	—	10,372,879
Anglo-Saxon Banks of the Capital	...	...	...	6,332,400	—	—	6,332,400
Agricultural and Stock-raising Companies	...	...	...	8,282,978	443,058	—	8,726,036
Savings Banks, Building Societies, Annuity Companies	...	...	...	7,016,067	88,000	—	7,104,067
Forestral Exploitation	...	...	...	5,550,880	597,900	—	6,148,780
Mining Exploitation	...	...	...	3,958,663	138,354	—	4,097,017
Refrigerator Companies	...	...	...	3,290,135	703,780	—	3,993,915
Telegraph Companies (wireless included), Telephones, etc.	...	...	...	2,431,004	302,400	—	2,773,404
National Insurance Companies	...	...	...	2,723,191	—	—	2,723,191
Breweries	...	...	...	1,780,972	352,800	—	2,133,772
Transport Companies (Land and Sea)	...	...	...	2,061,187	—	—	2,061,187
Local Provincial Banks	...	...	...	1,832,133	—	—	1,832,133
Sugar Refineries	...	...	...	1,198,456	588,368	—	1,786,824
Markets	...	...	...	1,197,820	423,360	—	1,621,180
Dairy Companies	...	...	...	696,784	16,360	—	713,144
Hotels, Theatres, Clubs, etc.	...	...	...	610,381	—	—	610,381
Metallurgical Companies	...	...	...	577,100	—	—	577,100
Flour Mills	...	...	...	425,340	45,158	—	470,498
Various Industrial Companies	...	...	...	7,555,232	60,000	—	7,610,232
Various Commercial Companies	...	...	...	3,793,891	—	—	—
Official Totals				£219,513,639	£104,502,123	£150,381,572	£474,396,935

The largest group of investments is constituted by the capital represented by the private railway companies, which amounts to £178,000,000, against £111,600,000 in 1904. This capital increases daily, and considering the development of the network of railways all over the country, it is not fantastic to prophesy that in a short time this sum will reach the figure of perhaps £200,000,000.

The second large group consists of the securities representing the External National Debt, which on the 31st December 1908 stood at £62,900,000, or £7,400,000 lower than that of the debt in circulation on 1st July 1905. This diminution arises from the redemption of bonds by means of the 6 per cent. Funding Loan, of which the total was £5,600,000.

If to the amount of this debt we add the sums represented by the external debt of certain cities, the internal debt of the nation, and the internal debt of some of the Provinces, we find that the entire Argentine National Debt forms a total of £130,000,000. We need not examine at greater lengths the composition and value of these two groups of securities, as we have already dealt with them in special chapters.

As for the insurance companies and foreign banks, any estimate of their capital is difficult; but it is otherwise in the case of the mortgage companies. The capital which these companies have invested in the Argentine is now of a nominal value of more than £16,500,000. But this is only a small portion of the foreign capital invested in mortgages in the Argentine; for the high interest earned by this class of investment, which a short time back rose to 10 per cent., has attracted large sums of foreign money which have been invested privately. Señor Tornquist estimates the foreign capital thus put out in mortgages at £9,000,000.

We must call attention to the interesting fact that the amount of foreign capital invested in the agricultural and other rural undertakings of the Argentine increases day by day. At the end of 1908 this capital amounted to £8,726,037, of which the greater part was the property of British subjects, who first devoted their energies to agriculture and stock-raising in the Argentine a comparatively long time ago. It is the English who have been the most active

agents of the rapid and extraordinary progress of Argentine stock-raising, especially in all that relates to the selection of breeds and the best manner of feeding.

Among the industrial undertakings, that which has of late years assumed the greatest importance is the frozen or chilled meat industry—the refrigerating industry. There are now nine refrigerating establishments, with a subscribed capital of £3,993,915. Other industrial undertakings, such as sugar factories, breweries, quebracho mills, and mines, are beginning to take a significant place in the list of Argentine securities.

The nominal total of all movable values being estimated, at the end of 1908, at £474,396,933, the question which now occurs is, What is the annual yield of these securities? This is the most difficult point of our inquiry, and one we can answer only by approximate estimates.

While it is simplicity itself to calculate the interest on the bonds of the public debt, whether external or domestic, it is anything but easy to calculate in all cases the dividends paid by each company to its shareholders. Some companies do not publish balance-sheets, and others confound the profits realised in the Argentine with the profits earned by their foreign houses or headquarters.

As far as our present knowledge goes, the revenue of the securities we have mentioned may be estimated to be as follows:—

Annual Revenue of the Securities of the Argentine Republic, 31st December 1908.

NAME OR NATURE OF SECURITIES.					Revenue in Pounds Sterling.
External National Debt	...	...	...	...	£3,209,727·2
Internal ,,	...	...	...	...	843,879·4
Municipal Debt of Buenos Ayres	...	...	...	...	196,135·4
,, ,, Santa Fé	...	...	...	...	1,636·0
,, ,, Rosario	...	...	...	...	120,000·0
,, ,, Córdoba	...	...	...	...	19,500·0
,, ,, Bahia Blanca	...	...	...	...	6,600·0
External Debt of the Province of Buenos Ayres	...	...	...	...	368,928·0
Internal ,, ,, ,,	...	...	...	...	255,904·0
Cedulas of the National Mortgage Bank	...	...	...	...	872,051·6
Debts of the Provinces of Tucuman and Entre Rios	...	...	...	...	29,013·4
Carry forward					£5,923,374·0

356 THE ARGENTINE IN THE 20TH CENTURY

*Annual Revenue of the Securities of the Argentine Republic,
31st December 1908—continued.*

NAME OR NATURE OF SECURITIES.					Revenues in Pounds Sterling.
				Brought forward	£5,923,374·0
Debt of the Province of Santa Fé	...	...	...	...	67,745·0
Railway Companies	...	...	...	...	8,423,510·8
National Banks of the Capital	...	...	...	...	1,131,499·6
Anglo-Saxon Banks of the Capital	...	...	...	...	788,680·8
Local Provincial Banks	...	...	...	...	53,725·6
Mortgage and Agricultural Loan Companies	...	...	...	...	1,044,847·2
Tramway Companies	...	...	...	...	907,603·8
Gas and Electric Companies	...	...	...	...	804,578·2
Telegraph and Telephone Companies	...	...	...	...	97,478·6
Harbours, Docks and Quays	...	...	...	...	293,447·8
Savings Banks, Building Societies, Annuity and Insurance Companies	...	...	...	...	254,852·2
Agricultural and Stock-raising Companies	...	...	...	...	496,309·2
Forestral Exploitation Companies	...	...	...	...	188,505·0
Refrigerating Companies	...	...	...	...	229,654·2
Markets	...	...	...	...	165,243·8
Mining Companies	...	...	...	...	23,816·8
National Insurance Companies	...	...	...	...	192,040·4
Sugar Refineries	...	...	...	...	165,154·6
Breweries	...	...	...	...	174,249·0
Dairy Companies	...	...	...	...	31,882·6
Metallurgical Companies	...	...	...	...	40,605·0
Transport Companies	...	...	...	...	251,783·2
Hotel and Theatre Companies	...	...	...	...	59,332·6
Mills and Granaries	...	...	...	...	33,765·2
Various Industries	...	...	...	...	169,253·8
General Commercial Companies	...	...	...	...	141,957·2
					<u>£22,144,939·2</u>

Now what, approximately, are the amounts of securities or movable values belonging to foreigners and to natives of the Argentine? Such is the question we must now set ourselves, as one of the most important relating to the country's future. Blessed with an immense area of territory, mistress of enormous and unexhausted natural wealth, and peopled by only 6 millions of inhabitants, the Argentine is a nation still in process of formation. She attracts men and money from all quarters of the globe; for she promises generous payment for initiative and for labour.

From the economic standpoint, then, it is of enormous importance for the Argentine whether the revenue of her securities goes to persons residing in the country, or whether,

on the other hand, it goes abroad, thus unfavourably affecting the result of her commercial transactions, and threatening to upset the balance of international payments.

In the case of a country which exists under the special conditions which affect the Argentine, where there are no accumulations of capital, where the spirit of enterprise is not very highly developed, and where every commercial or industrial undertaking of any importance has to look to the outer world for support, the total of the sums which leave the country each year to pay for imported articles, to meet the interest on the National Debt, to pay the dividends on the shares of limited companies, and the profits of private undertakings, the interest on capital out on loan, whether on mortgage or otherwise secured, and finally to remunerate capital invested and employed in the thousand different ways peculiar to this period of rapid intercommunication—the total of all these sums must be very great; something, indeed, like a metallic river rolling across the ocean.

So much being granted, the moment has come to present the problem: of the 22 million pounds required to pay the interest on loans, the sinking-fund charges for their redemption, and the dividends of hundreds of companies, what is the proportion which each year leaves the Argentine to become spent or invested abroad, assuring the owners of bonds and shares the best part of the revenue of a distant country, a country endowed with a fertile soil, in which industry has a great future awaiting it? And what proportion of this total remains in the country?

To solve this problem, it would be necessary to follow the track of each of the shares or bonds issued, in order to discover the destination of each; and this is what we shall attempt to do, with the help of the principal banking houses and the great commercial houses in financial relations with the outer world.

Although all estimates on such a subject must rest upon the slightest foundations, and cannot be accepted as precise statistics, we do not hesitate to give a few figures as an indication worthy of credence, being drawn from the best possible sources.

To proceed with due method, let us begin with the most

important division of the foreign capital invested in the Argentine, namely, English capital, which was the first to come from abroad to stimulate the progress of the country. According to an inventory made by the banking house of Tornquist & Co., which has willingly given us the information we required, the capital imported from England and invested in Argentine securities amounts to more than £290,000,000, distributed as follows:—

English Capital Invested in the Argentine.

	Capital.	Interest.
Loans—Governmental, Provincial, Municipal ...	£63,854,643·8	£3,046,598·2
Railways	166,360,683·2	8,049,431·8
Banks	7,862,400·0	705,096·0
Agricultural Loans and Mortgages	6,847,216·6	259,732·2
Tramways	20,284,705·6	875,603·8
Electricity	5,152,590·4	287,685·2
Agriculture and stock-raising	4,018,997·8	248,204·8
Various investments	14,729,708·8	785,986·4
	<u>£291,110,946·0</u>	<u>£14,258,338·4</u>

Thus this sum of £291,110,946 sterling represents an annual revenue of £14,258,338.

To continue: in seeking to find the true amount of the economic international balance, we should have to include in the inventory of English capital bound to the Argentine by commercial transactions the large number of steamers which run between British and Argentine ports, whose value might be represented by a sum not less than £10,000,000.

If this be added to the sum already obtained, we find that the English capital invested in the Argentine or bound to the country by commercial ties is not less than £300,000,000; the revenue of which, estimated at an average of 6 per cent., represents a sum of £18,000,000 per annum, entirely paid out of the production and the economic forces of the Argentine.

To test the accuracy of this estimate we may mention that according to a conscientious study of English capital as placed in the principal countries of the globe, a study published in 1909 in the *Economist*, the sums invested in the Argentine

amount to £254,000,000 ; a figure not very different from that we have already given.

But let us be content for the moment to realise that the known inventoried revenue on bonds and shares belonging to British companies or British subjects residing or situated in England amounts to £14,000,000 after the deduction of the portion remaining in the hands of Englishmen residing in the Argentine ; and in the presence of such figures let us meditate for a moment on the social and economic consequences of such a fact.

English capital, since the dawn of the organisation of Argentina, has been the great propulsive agent of all national progress. In 1822, when she was still insignificant both in riches and in population, Argentina knocked for the first time on the doors of British capitalists, asking them to lend a million pounds to be used for the construction of a harbour, for the instalment of waterworks in her capital, and for the foundation of cities ; projects which were never executed ; for it was with this loan as it was to be afterwards with many other Argentine loans. The funds demanded on credit were not employed to further the object for which they were solicited. After this first loan all other Argentine loans were subscribed by British capital.

Moreover, no industrial or commercial undertaking has been established in this country but it has gone to seek the breath of life in the financial houses of the City. Professor Eteocle Lorini said with reason, in commenting on this fact in his book, *Il Debito Pubblico Argentino* : " All the industrial, commercial, agricultural and mining companies which furnish our Argentine statistics bear the foreign mark, *limited* ; so that one ends by getting the impression that one is studying a purely English colony, for one finds this *limited* upon all species of manufactures ; *limited* after the statement of capitals ; all undertakings are *limited* ; insurance is *limited* ; the circulation and distribution of Argentine wealth is *limited*."

Whatever may be the importance of the limited company, it is by no means to the interest of the Argentine to declare war upon foreign capital ; she should, on the contrary,

respect the far-seeing provisions of her Constitution, which imposes upon Congress the duty of encouraging the introduction of foreign capital conjointly with a foreign population, because both are vital elements of the national development and progress. But while we respect this tradition we feel that the Government should, in counteraction, endeavour to stimulate the application of Argentine capital to commercial or industrial enterprises, in order that the entire resources of the country shall not be developed for the sole profit of the foreigner.

Professor Lorini, whom we have just quoted, is of the same opinion. "We are certainly not of those," he says, "who complain of the introduction of foreign capital. The more the latter is imported, the more it gives employment, and increases yet more the wealth and welfare of the country. But we must also add that as more capital arrives from without, so the payments which the country has to make for the use of it grow larger, and for this reason the whole financial policy of the Government and the Argentine should have as its object the introduction of the severest economy and the greatest possible thrift; not only that engagements contracted may be honourably met, but that in course of time we may form a national capital, capable of competing with foreign capital, of reducing its pretensions, and even of replacing it little by little, should the latter, for any reason whatsoever, be compelled to emigrate in virtue of causes foreign to the economic laws of the country."

After England France stands in the first rank of those European nations which have had faith in the future of the Argentine, and have risked the investment of their capital in this young and wealthy state. Unhappily the total amount of French capital invested has not been augmented, as one might have hoped, by the political and commercial ties which for many years have united the two countries, or by the fertile opportunities which the Republic has to offer to the activity and enterprising spirit of the Latin races.

The *nominal* total of Argentine securities quoted on the Paris Bourse amounted, on the 31st of December 1907,

to the value of £78,999,308, which sum may be analysed as follows:—

State funds ...	...	...	...	£52,332,306
Banks ...	...	...	...	10,335,680
Transport ...	...	...	...	12,802,290
Mines ...	...	...	...	548,978
Various ...	...	...	...	2,980,000
				<hr/>
				£78,999,254

To prevent an erroneous interpretation of the above figures, it should be stated that this total does not represent the value of the securities actually held by Frenchmen, but only the securities quoted on the Bourse, which is a very different matter. For example, the French Bank of the Rio de la Plata figures in this total to the extent of £2,400,000, the amount of its capital actually subscribed, although scarcely a quarter of it circulates in France.

On the other hand there is a very considerable quantity of Argentine securities belonging to capitalists or investors living in France; securities which are not quoted on the Bourse and are not deposited in any bank. We may cite as an example the last loan of £10,000,000, issued under the title of "Internal Argentine Credit 1909." Of this amount £3,400,000 was subscribed in France, yet the bonds of this loan, on account of a difference with the French Government, have not yet been quoted on the Paris Bourse.

We are thus justified in concluding that the amount we have given as representing the value of the stock held by Frenchmen—£78,998,854—is approximately correct; and that the two factors which affect the matter in opposite senses may be taken to cancel one another.

We must also note the fact that the majority of Government funds find as large a market in London as in Paris. For example, the 4 per cent. loan of 1897-1900, which was entirely issued in London, was only admitted to quotation on the Bankers' Exchange of Paris in 1903.

In the banking department, the shares of the Spanish Bank of the Rio de la Plata and the French Bank of La Plata were only introduced to the Paris Bourse at the beginning of 1908; the principal market for these shares is still at Buenos Ayres.

In the transport department, the General Company of

the Tramways of Buenos Ayres, which has a capital of £1,800,000, can only be represented in France by a very small proportion of this capital; the shares have been issued principally in Brussels, London and Berlin.

We must remember that French influence in the Argentine has been active for a long time and in various ways. It was especially the immigration of the worthy inhabitants of the French Pyrenees which first set in towards the Rio de la Plata, where the Frenchmen invested their energies in many remunerative departments of labour; some becoming farmers, some cattle-breeders, some giving themselves to industrial work, some to trade in the cities; thus contributing to the development of the wealth of the country. The French mercantile marine was also the first to establish and maintain a rapid and easy transport between French and Argentine ports, thus permanently uniting the two countries.

As for French commerce, it retained, as lately as 1884, a place in the first rank with regard to the exchange of manufactured articles or the products of the soil, the trade being carried on especially through the medium of the Rio da la Plata; indeed there was a time when French commerce represented 51 per cent. of the total trade of the Argentine, while now it is responsible for only 20·7 per cent. of the total value of Argentine imports and exports united.

We may therefore consider that the part played by French capital in Argentine affairs is much too small as compared to the function of English capital, and we must regret that France is not more deeply interested in the great movement towards national prosperity.

After France the European nation which has invested the largest amount of capital in the Argentine, and which has fully understood the true importance of the latter country, is Germany.

In the remarkable increase and expansion of her industries Germany has not forgotten the shores of the Rio de la Plata. She has entered upon a struggle with England; all her electrical and chemical undertakings have taken root; factories have sprung up due entirely to German capital; a German Transatlantic Bank has been established in Buenos

Ayres; the Hamburg South American Company flies its ensign on the ocean, swiftly carrying passengers and merchandise between the two continents; a German electrical company has established its power-houses in the Argentine capital; an extract of meat company is drawing its profits from the live-stock industry; several quebracho mills have been founded; many other factories have been established, and the Germans have thus absorbed a large proportion of the Argentine export trade.* The commercial relations between Germany and the Argentine increase each day. Twenty years ago the exchanges between the two countries represented hardly 19·4 per cent. of the general foreign trade of the Argentine—at a time when France possessed 51 per cent. instead of her present 20·7 per cent. of the trade—while in 1908 the exchanges with Germany amounted to 23·4 per cent. of the entire trade.

What is the total value of the German capital invested in the Argentine Republic? It is not easy to say with strict accuracy; but according to the very authentic information of certain Buenos Ayres bankers we may reckon that the German capital employed in the banks, commercial houses, *estancias*, and industrial concerns, and in the German Electrical Company, the electric tramways, etc., etc., amounts to £40,000,000. If to this capital we add that represented by the vessels under the German flag, which maintain an active communication with the Rio de la Plata, obtaining a large proportion of the best clients, the total of the German capital employed in the Argentine amounts to some £60,000,000.

With these data in hand, and an approximate knowledge of the amount of foreign capital invested in this country in shares, bonds, and other securities, namely some £384,000,000, as well as its approximate revenue, which in round figures is about £18,000,000, plus £1,600,000 as the general sinking

* In the course of the year 1908 there left Buenos Ayres, in the vessels of various lines, 10,805 first-class passengers for Europe, of whom 2750 left by the *German Company of Hamburg*; 2041 by the *Royal Mail Steam Packet Co.*; 1193 by the *Messageries Maritimes*; 791 by the *Transports Maritimes à vapeur*; 711 by the *General Italian Navigation Co.*; 688 by *La Vélocé*; 588 by the *Italia*; 556 by the *Lloyd Sabando*; 377 by the *Lloyd Italiano*; 340 by the *Spanish Transatlantic*; and the rest by vessels of various less important lines.

fund charge, or in all about £19,600,000, we may draw the following conclusions:—

We know that the revenue of the bonds held by the English capitalists, including the sinking fund, amounts to £14,158,337. Again, the amount necessary to pay the interest on the bonds of the National Debt, cedulas, debentures, and shares held by French, German, and Belgian investors, may be estimated at £3,698,779; so that of the total revenue of £18,493,896 produced by the Republic, there remains in the country a balance of £4,287,820.

THE BALANCE-SHEET

Nothing is more difficult than to bring together the constituent elements of a national balance-sheet, on account of the complexity of the necessary facts which often escape the net of the statistician. Beginning with the most important elements of this balance, and, so it seems, the most plainly visible—those formed by the movement of exports and imports through the customs—and ending with the most insignificant facts, there are still a large number of factors for which it is impossible to allow.

Taking a broad view of the matter, we must first of all observe that the estimates by which we finally decide that that which leaves a country, whether in merchandise or in specie, is of greater value than that which enters it, are extremely arbitrary. The principal means of appreciation is the table drawn up by the Customs Administration upon cargoes leaving and entering the country, but the results drawn from this table are inevitably approximate. On the one hand the declarations upon which the valuations are based are always untrustworthy, as they are made by individuals who are interested in diminishing the actual values of their consignments. On the other hand, they are influenced by a thousand other circumstances which the customs cannot take into account, such as shipwrecks and unfortunate commercial transactions.

Moreover, merchandise exported is usually valued by the customs at the moment of leaving the port of embarkation; that is, when it has so far paid only very small sums for

carriage and transportation. Imported merchandise, on the other hand, is valued at the time of its disembarkation, in the ports of arrival or destination, when it is already burdened by all the expenses incident to a long voyage; such as freight, insurance, brokerage, etc.

It very often follows that in calculating the results of a given transaction, and in supposing, moreover, that the estimates are perfectly correct, we often find a perceptible difference between the comparative figures of exportation and importation, which must be settled (so it is often supposed) by a payment of cash, whereas in reality the whole transaction consists of a simple exchange of commercial products.*

Besides these general causes of error in the calculation of the principal elements of the Argentine balance-sheet, there are others affecting the Argentine which we might call local, which arise from the manner in which the customs estimate the merchandise imported. We have seen that the Customs Administration bases the collection of duties upon a valuation tariff, the exaggerations of which have given rise to the liveliest complaints. As for the statistics of the exports of national produce, they are based upon the market prices.

As for the foreign capital invested in securities, etc., we know its value within a fair degree of approximation. But it is quite otherwise with the large masses of foreign capital employed or invested privately, whether in mortgages, commercial enterprises, urban or rural properties, or in a thousand other directions; we know neither the total amount nor the interest, nor profits which it produces. These profits are a permanent cause of uncertainty with respect to the establishment of the national balance-sheet.

Apart from these causes already enumerated there is yet one other which deserves to be taken into account; it consists of the sums which Europeans who are established or have become enriched in the Argentine send each year to their families abroad. We have, unhappily, no means of estimating the importance of this sum.

* See *Nouveau Dictionnaire d'Economie Politique*, Article *Balance du Commerce*, by Georges Michel.

Finally, a cause of inaccuracy which is felt at present as it never has been before, has its rise in the ever-increasing number of natives of the Argentine who leave their country for Europe, their purses well lined, and themselves ready to spend their money in superfluities or luxuries, or in travelling from place to place.

According to the information furnished us by the agents of various steamship companies, 10,805 first-class passengers left the Argentine for Europe in 1908, in search of more or less costly amusement.

What will one of these rich South Americans spend abroad? How far do the mass of them contribute to increase the sum which the country pays out across the ocean every year? It is difficult to guess; but if we estimate, as we moderately may, that each of them spends about £1000, we may add on this count only a sum of £1,080,500 to the debit side of the Argentine balance. On the other hand, we have not included among the yearly liabilities the enormous sums which the country pays each year in ocean freight charges, because in fixing the sale price of exported products the freight has already been deducted, as well as insurance, brokerage, commissions, the cost of wharfage, etc., etc. But to give some idea of the importance of these sums it is enough to say that, according to estimates worthy of evidence, the Argentine Republic paid in freight, in the year 1908, for the transport of some 6 million tons of linseed, wheat, and maize, at the rate of £1 per ton of grain, a sum of about £6,500,000.

These figures having been considered, we may now establish as follows the basis of the economic balance of the Argentine:—

The Credit side is formed in the first place by the value of the exports, which in 1908 increased to £73,200,000; then by the great and incessant consignments of capital on the part of already existing companies, or new ones which are formed to exploit railways, tramways, or other industrial undertakings, or to undertake the mortgaging of landed property. An economic journal, much valued in Buenos Ayres, the *Buenos-Aires Handels Zeitung*, estimates at £8,000,000 the amount of fresh capital which enters the

country each year. The third class of assets is constituted by the sums brought into the country by immigrants, which are estimated at £1,800,000. The total of all these sums amounts to the considerable figure of £83,000,000.

On the Debit side we must first of all place the value of imports, which in 1908 amounted to £54,600,000, including the large arrivals of railway and tramway material which the country has not to pay for immediately, as it obtains them upon long credit; this item is consequently much smaller in reality than it appears at first sight. Then comes the interest on the foreign capital invested in the Argentine Republic in bonds of the National Debt, in railway shares, tramway shares, and various other undertakings.

We have seen that the revenue of all these securities issued by or in direct relation with the Argentine Republic amounts to £22,000,000, and that of this sum £4,300,000 remains in the Argentine; we therefore conclude that £18,000,000 leaves the country each year as remuneration for investments.

Then we have also to enter upon the debit side a total of £84,400,000 which "seems to leave the country" each year in payment of the debts contracted with foreign countries. But in reality this sum is perceptibly less, for the reasons we have mentioned above, so that we may reduce it to £80,000,000.

Now, if we place side by side the Debit and Credit of the nation's economic balance account, we shall find that in the year 1908 there was a favourable balance of not less than £3,000,000.

It is undeniable that this favourable balance has in fact been obtained, not only in 1908 but also in previous years, for there exist two irrefragable proofs of the fact: the rates of international exchange, always favourable to the Argentine, and the uninterrupted stream of metallic currency which flows towards the Rio de la Plata. "The state of exchange," as Goschen has said in his work on the subject, "offers us the means of ascertaining not only the state of the commercial atmosphere, by indicating the proximity of disturbing currents, but it also indicates them in such a manner that by interpreting them carefully, we may choose

the line of conduct to be followed in order to steer clear of danger, and to avoid the precipitate results of panic."*

"The attentive observation of exchanges," says the economist Foville, confirming by these words the assertion of the expert just cited, "suffices to indicate to the minds of those competent whether the monetary stock of a country is in process of increasing, or whether, on the contrary, there is an escape of currency towards the outer world. Exchange tells us in which direction bullion is being attracted, at a given moment, just as the weathercock tells us the direction of the wind."†

Now if we examine the table showing the international variations of exchange during the last five years we shall find that the latter are on the whole high above par; in December 1906 and January 1907 especially they attained considerable figures which have never since been surpassed.

As for the importation of bullion and the visible existence of gold in the country, it will serve our purpose to know that according to the official figures there was on the 31st of December 1907 a total of £29,060,000 in the country, which was distributed as follows: £21,020,000 in the *Caisse de Conversion*, and £8,040,000 in the various banks, including the Conversion Funds. A year later, on the 31st of December 1908, these figures attained a total of £34,860,000, of which £25,340,000 was in the *Caisse* and £9,520,000 in the various banks. But in the course of the year 1909 this upward movement has been even more evident, since the total amount of gold in the Republic on the 1st of November 1909 was no less than £53,800,000, of which £34,800,000 was in the *Caisse* and £19,200,000 in the banks or the Conversion Fund. It is already therefore certain, if we are to judge by the important consignments of gold actually on the way to the Argentine, that by the end of 1909 the Republic will possess metallic funds to the amount of at least £56,000,000.

We have seen what a part foreign capital has taken in realising the economic value of the Argentine and the influence it has exerted in developing the country. It

* C. I. Goschen, *Theory of Foreign Exchanges*.

† See in the *Bulletin de l'Institut International de Statistique*, Vol. XV., 1906, p. 200 : *Les Eléments de la balance économique des peuples*, by A. de Foville.

is employed in the greatest variety of ways : in State loans, railways, and every branch of industry. To it we owe harbours and railways ; that is, the principal factors of economic wealth ; it is foreign capital, invested in navigation companies, which puts the Argentine in touch with all the nations which consume her products.

However, placing ourselves at the standpoint of the laws of evolution which preside over the destinies of the nations, we must admit that, in view of the present prosperity of the country, the intervention of foreign capital in the affairs of the Republic must daily lessen, in proportion as a national reserve of capital collects ; as has happened in the United States, and in all states which are in the first rank of civilisation. But the term of this economic movement is still far removed, and until the day arrives, foreign capital will in all security continue to find employment in navigation and in public works, and also in those nascent industries which are beginning to exploit the mineral wealth of the Republic.

CONCLUSIONS

THIS volume does not call for a long summary ; for we have, we believe, in the course of our enquiry, thrown sufficient light upon the characteristic aspects of the situation of the Argentine to enable the reader to judge of the place it now holds in the world-market among the great producing nations. But what does remain for us to do is to sum up in broad touches the fundamental progress realised in the last few years ; a degree of progress to which the country is indebted for its modern prosperity, and which bears the seeds of its future development.

Firstly, to deal with the matter of international politics, we must remember the solution of the frontier dispute with Chili, which for more than fifty years was a cause of alarm as well as of expense, and which had threatened to become embittered to the extent of arresting the stream of European immigration and European capital so necessary for the improvement of the Argentine soil. The example afforded by these two Republics of South America, which of their own initiative had recourse to arbitration, rather than finally settle their difference by a resort to arms, and then pledged one another to delete gradually from their budgets the unfruitful item of military expenditure, surely indicates that a new spirit is awake in the Argentine, and that she looks to pursue her future destinies along the paths of peace and industry.

In the matter of economics the capital fact consists in the enormous expansion of the two fundamental industries of the country—agriculture and stock-raising. To measure the ground covered, it is enough to mention that in 1900 the total value of the products of stock-raising was only £12,200,000, while in 1904 this value had increased to £21,000,000, and in 1908 to £22,200,000. It has been the same with the products of agriculture ; in nine years their export value has increased from £14,600,000 to £48,000,000.

Under the stimulus of this progress an intense vitality has manifested itself in every department of national activity ;

the power of consumption of the Argentine, as measured by the statistics of importation, has largely increased ; property has in many places attained ten times its former value ; commercial transactions of every kind have increased ; and new industries, such, for instance, as the refrigerative industry, have been created and are prospering. It is therefore evident that the dominant characteristic of the present situation of the Argentine from the economic point of view must be sought in the remarkable expansion of all the forces of production.

The most eloquent proof of this economic prosperity has just been furnished by the late census of agricultural and pastoral enterprises, effected in 1908 by Señor Martinez. The total value of these undertakings, representing the better part of the national wealth, attains, as the table on the following page will show, the figure of £773,000,000.

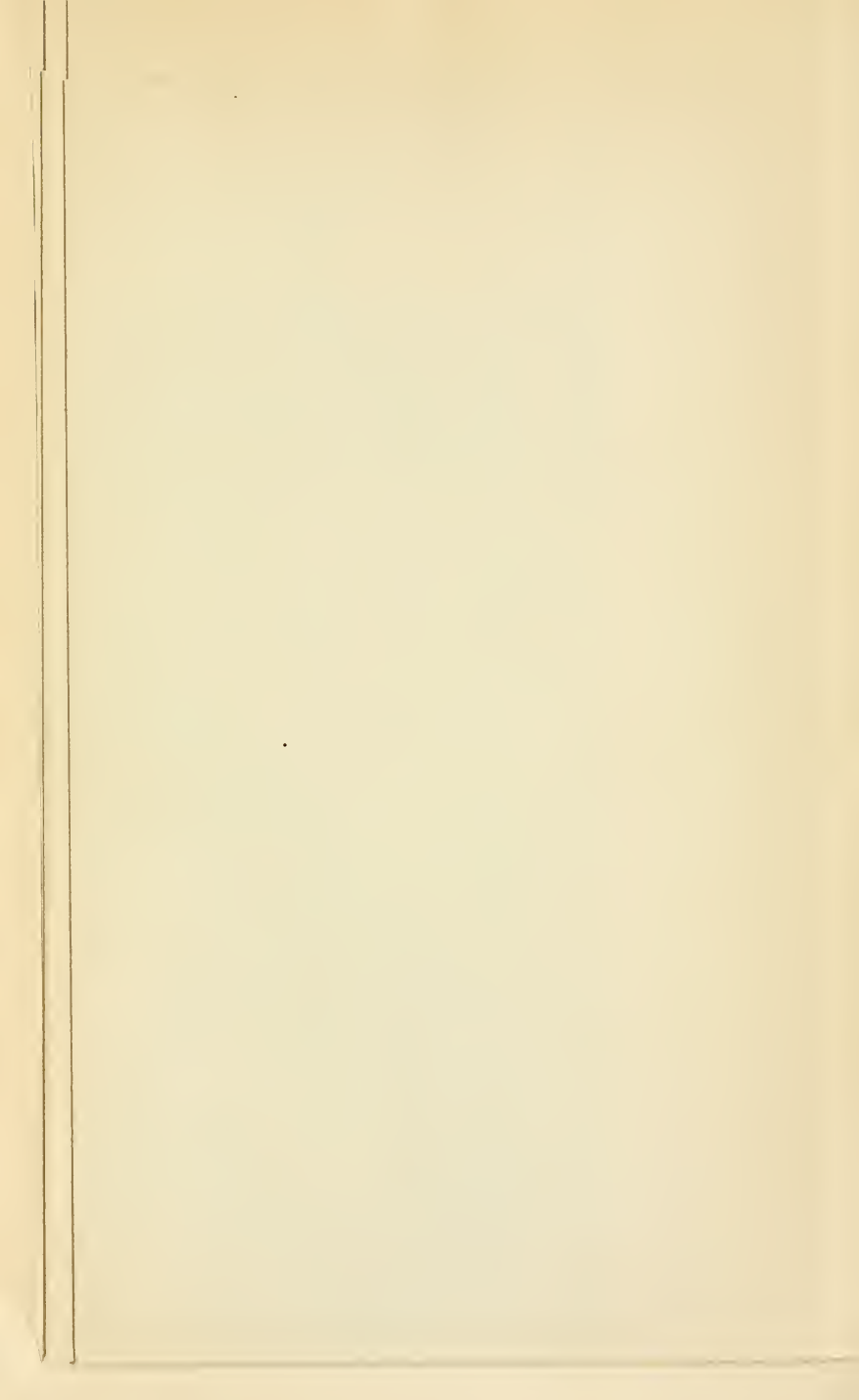
Now, to speak of financial matters, there is a third factor, which came very opportunely to consolidate the results of the wonderful expansion we have spoken of—the law of monetary conversion. While it was laying the foundations of the future conversion of the fiduciary circulation, this law created a reserve fund to make it presently practicable, and so gave stability to the instrument of exchanges ; suppressing the gold premium, so prejudicial to business, and supporting the prosperity of the country by a fixed and common-sense currency ; a support which the country needed in order that it might develop without checks and shocks, but one it had hitherto lacked. No measure has contributed more than this to the relief and improvement of Argentine credit, and to the increased value of the public funds, which will before long result in the work of financial reorganisation.

The results of this happy conjunction of political, economic, and financial facts were not long to seek ; for in less than five years the Argentine passed from a state of chronic crisis to the fullest prosperity known since her existence as a nation. But to preserve all the benefits of the progress accomplished the young Republic has still one task to fulfil : to fortify domestic peace, to perfect her political system, and to improve her principles of administration ; conditions indispensable to the assured and normal development of the country and its future greatness.

*The Total Value of the Agricultural and Pastoral Farms and Estates of the Argentine Republic**
(According to the Agricultural Census of May 1908).

PROVINCES AND TERRITORIES.	Length of Iron Wire Fencing (in Miles).	VALUES IN POUNDS STERLING.				Total Value.
		Soil.	Animals.	Fixed Plant.	Machines and Tools.	
Buenos Ayres	224,500	£326,314,000	£65,803,000	£22,599,000	£7,317,000	£422,033,000
Santa Fé	68,800	92,986,000	11,714,000	6,134,000	3,182,000	114,016,000
Entre Ríos	49,600	24,483,000	10,550,000	3,686,000	1,179,000	39,898,000
Corrientes	40,600	3,190,000	7,950,000	1,513,000	230,300	12,883,300
Córdoba	73,800	38,306,000	10,128,000	5,934,000	2,419,000	57,837,000
San Luis	14,000	6,047,000	2,119,700	1,270,000	202,000	9,638,900
Santiago	5,560	4,472,000	2,128,000	891,000	144,000	7,635,000
Tucumán	9,480	4,457,000	1,501,000	2,115,000	192,000	13,265,000
Mendoza	5,100	40,045,000	1,257,000	2,352,000	230,000	43,844,000
San Juan	3,160	3,462,000	411,000	1,602,000	126,000	5,601,000
La Rioja	716	3,170,000	1,061,000	809,000	36,190	5,076,190
Catamarca	1,830	3,223,000	795,000	1,348,000	26,000	5,392,000
Salta	3,600	3,024,000	1,756,000	762,000	78,650	5,620,650
Jujuy	1,460	200,000	577,000	241,800	19,600	1,038,400
Chaco	1,680	726,000	669,000	155,700	37,800	1,388,500
Chubut	2,260	656,000	1,642,000	334,000	61,070	2,643,070
Formosa	360	351,000	556,000	134,000	15,000	1,056,000
La Pampa	113,430	10,908,000	3,693,000	1,382,000	542,000	17,525,000
Los Andes	211	—	36,900	35,200	—	71,900
Misiones	2,240	635,000	216,000	233,000	22,800	1,106,800
Neuquén	398	819,000	887,000	189,000	35,490	1,930,490
Rio Negro	10,520	2,739,000	2,440,000	863,000	168,000	6,210,000
Santa Cruz	6,560	1,003,000	890,000	598,000	32,600	2,523,600
Tierra del Fuego	2,700	125,000	460,000	269,000	21,700	875,700
	642,065	£571,563,430	£130,179,700	£55,477,500	£16,321,270	£773,541,930

* The details are in round figures, the totals official.





INDEX

AGRICULTURE, peculiarity of production, 109 (125-153); principal regions, 125; chief crops, 126; size of holdings, 127-9; land agencies, 130-1; usual land tenure, 132; dependent on railways, 132; produce (tables), 135, 136, 137 (table); increase of sown lands, 139; statistics of area (table), 140-1; profits of (tables), 147-151; wheat, 154-161; agricultural exports (table), 227; total value of agricultural and pastoral holdings, 372

Agricultural census, *see* Census

Agricultural industries, *see* Industries

Agricultural machinery, *see* Machinery.

America, *see* United States

Andes, climate of, 73

Area, of Argentine, 72; cultivable, 76

Argentine nationality, the, 59-68

Argentine Republic, the position of, 71; boundaries 71; area, 72; climate, 72-4; soil, 74-6; scourge of locusts, 77; rivers, 77; almost a desert nation, 115; production of wheat in, 154-161; foreign trade, 211-234

Austria, trade with, 226

BAHIA BLANCA, port of, 89-90

Balance-Sheet, the, of the Argentine, (349-372); securities in circulation (table), 352; revenue of same (table), 355-356; interest paid on foreign capital, 357; table of English capital, 358; of French, 361; German, 363; favourable balance, 367; total value of farms and estates, 372

Banks, (261-278); balance-sheets of, 265-268; nature of business, 266-70; clearing-house, 270; balance-sheet of the Bank of the Province of Buenos Ayres, 274; *see* Mortgage Banks

Bank of the Nation, the, 270; balance-sheets, 272

Belgium, trade with the Argentine, 219-225

Boundaries of the Republic, 71

Bourse, the (278-286); extent of operations, 280-1; organisation of, 276; regulations, 283; table of operations, 283-4; value of securities quoted, 284

Brazil, trade with the Argentine, 219, 225

Breweries, 242 (table), 243

Budget, the (295-309); amounts of, 296; cause of excessive budgets, 299-304; composition of, 305

Buenos Ayres, 83; harbours of, 84; market of, with statistics (table), 84-5; port, inward and outward trade of, 85 (table); importance as a port, 86.

Buenos Ayres, province of, 142

Bullion, imports and exports of (table), 218

Butter, exports of (table), 241-2

CANADA, wheat production, 160-1; immigration policy, 161

Capital, foreign, invested in the Argentine, 351; English, 358; French, 301; German, 303

Cattle, numbers of (table), 241

Census, agricultural, of 1905, 127; of 1908, 128; of 1888, 134; of stock of years 1888, 1895 and 1908, 169; of 1908, 171; of cattle, 1895 and 1908, 172; 1895 and 1908, 241-2; of land, 1908, 372

Cereals, congestion of, on railways, 109; shipping of, 110; warehoused at railway stations, 112; where grown, 126; area under, 142-4

Colonisation, commencement of, 116; comparative failure of policy, 117, 121

Colonising agencies, 131

Commerce, *see* Foreign Trade; commercial balance (table), 212, 232-4;

Companies, *see* Limited Companies

Concessions, harbour, 88; railway, 99

Conversion, *Caisse de* (342-348); conversion fund, 343; failure at first, 343-5; operation under new laws, 347; metallic reserve of, 347; present functions of, 348

Cordoba, 142-4

Cotton, 199-201; profits, 200

Currency, the double (330-341); origin of, 330-1; depreciation of paper, 331-2; bimetallic standard established and suppressed, 332; gold premium, 332-3; excessive issues of paper, 334; law of conversion, 337; speculation in exchange killed by, 339; monetary situation of the country, 341. *See Caisse de Conversion*

DAIRY industry, 240 (table), 241, 242

- ELECTRIC** lighting, 257
Electrical industry, the, 256; tramways, 256; (table), 257
England, wheat imported by, from Canada, 161
Estancias, model, 163-167
Exchange, *see* Double Currency
Exports, *see* Trade. Tables of, 160; of wheat, 159; of general, 213, 221; of meat, 239; of butter, 241
FINANCE, *see* Balance-Sheet of the Argentine.
Financial crisis, the, 289-291
Fisheries, 248
Flour exports, 237
Foreign trade (211-234)
France, trade with the Argentine, 219, 224; French tariffs highly unfavourable to the Argentine, 223; decadence of trade, 223-4, 229
Fruit-farming, 202, 207
GERMANY, trade with the Argentine, 219, 222
Great Britain, trade with the Argentine, 219, 222
HARBOURS, *see* also Ports, development of, 83
IMMIGRATION, (113 - 121); supremely needed, 114; paradise of, 115; statistics of, 118-9; statistics of (table), 120; difficulty experienced by immigrants who wish to buy land, 121; mistaken policy, 121; in Canada, 161
Imports, *see* Trade and Tables of, 219, 226
Industries, Agricultural (187-207); sugar-planting and making, 187-192; profits (table), 189; vine-growing and wine-making (table), 192-195; tobacco-planting, 195; acres planted (table), 196; cultivation of the mulberry and sericulture, 196-7; the maté industry, 197-8; imports (table), 198; cotton-planting, 199-201; where grown, 199; profits, 200; oil, 201; rubber, 201; fruit-growing, 202-207
Industries (235-249); dependent on agriculture and stock-raising, 235; sugar factories, 236-7; flour-milling, 237; refrigerating industry, 238; (table), 239; dairy industry, 240; (table), 241-2; breweries, 242; (table), 243; weaving, 244; tanning, 244; the quebracho industry, 244-248; timber, 248; fisheries, 248; mining; 251-5; electrical, 256; (table), 257; electric lighting, 257; (tables), 258-9
Italy, trade with the Argentine, 219, 226
JAPAN, trade with, 230-1
LABOUR, great opportunities of, 115
Land, vicious system of ownership, 118; prevents colonisation, 121; average size of holdings, 127-9; national possessions and enormous private holdings, 129; land law of 1907, 130; system of tenure, 132; agencies, 131; auctions, 131-3; areas in cultivation, 134; rise in value, 139; values of, and sales, 174-185
Limited Companies (286-292); constitution of, 286-8; the crisis of 1890, 289-291; table of capital invested in, 291
Linseed, profits of, 150
Locusts, 77
Lucerne, 137-8; use of in stock-raising, 162; affects value of soil, 174
MACHINERY, agricultural (table), 144-5; tables, 146, 148
Markets, Buenos Ayres (table), 84
Maté, 197-8; where gathered, 197; imports, 198
Métayage, 133, 138
Mines (250-5); gold, silver, copper, coal, antimony, sulphur, etc., 253-4; mining laws, 255
Mortgage Banks, 275-278
Mulberry, cultivation and use of, 196-7
NATIONAL debt, the (312-329); tabulated amount of, 312; first loans, 314; further loans, 315-321; table of internal debt, 322; total debt, 323; interest on, 324
Nationality, the Argentine, 59-68
PAMPA, the, 75, 144; production of wheat per acre, 157
Pampero, the, 73
Parana, Rio, the, 79; navigable value and dredging of, 80-1; ports on the, 82, 88-9
Plata, La, port of, 86
Plata, Rio de la, 79
Plate, river, *see* Plata
Population, density of (table), 113-4; 117
Ports, 82; statistics of (table), 83; on the Parana, 82; Buenos Ayres, trade of (table), 85; *see* Plata, 86; Bahía Blanca, 89
Property, large private, 129
Provinces, population of, 113-4; produce of, 137

QUEBRACHO wood, effect on value of land, 74-5; the quebracho industry, 244-248

RAILWAYS (91-112); mileage of (table), 93; general statistics (table), 94; comfort and equipment, 95; statistics (table), 96-7; revenues of, 98; administration and tariffs (table), 98-9; cost of, 99; concessions, 99; guarantees, 99; mileage, 100-1; comparative mileage (table), 102; projected lines, 103-4; Government policy, 104; future development, 106; celebrated aerial railway, 107; indispensable auxiliary of production, 108; congestion of traffic, 109; mileage and capacity of cars (table), 111; warehousing by, 112

Rainfall, 73

Refrigerating industry, 238; (table), 239

Revenue, 305-310

Rivers, 77-82

Rosario, capacity as port, 80-81; second port of Argentine, 87-8

Rubber, 201-2

SANTA FÉ, 142-3

Seasons, 72

Sericulture, 196-7

Shipping, 110

South Africa, trade with, 225

Spain, trade with the Argentine, 219

Stock Exchange, the, *see* Bourse

Stock-raising, (162-173), 125; where followed, 127; probable decay of old large estancias, 130; industry undergoing modification, 162; use of lucerne in, 162; account of model establishments, 163-167; breeds of horses, 163; cattle, 163; sheep, 164, etc., *seq.*; importation of pedigree animals, 168; statistics (tables), 169, 171, 172, 173; value of stock (tables), 172, 173

Sugar (187-192); where grown, 187-8; profits (table), 189; size of harvests, 191; bounties, 195, 236-7

TANNING, 244

Tariffs, 215-217

Taxes, direct and indirect, 305-308

Telegraphs, 257

Telephones, 258

Temperature, 72

Territories, national, population of, 113-4 (table); private property in, 129

Textile industries, 244

Timber trade, 248

Tobacco, 195-196

Trade, foreign (211-234); exports and imports (table), 213; excess of exports (table), 214; metallic imports (table), 218; imports with countries of origin (table), 218; imports (table), 220; exports (table), 221; commercial balance, 232-4; *see* industries (234-249); in chilled or frozen meat (table), 239; value of exports, 326

Trade, *see* Industries

Traffic, through ports (table), 83; railways, 89-112; shipping, 110

Tramways, horse and electric, 256; (table), 257

UNITED STATES, wheat, production of (table), 158; exportation of (table), 159; trade with the Argentine, 219, 229

Uruguay River, 79

VALUATION OF SOIL (174-186), *see* Land
Vines, 127 (192-5); where grown, 192

WHALING, 248

Wheat (154-161); statistics of, 136, 137 (table); profits of growing (tables), 148-9; production of (tables), 154-5; production per acre, 157; production in U.S.A. (table), 158; yield per acre in, 158; exportation of (table), 159; exportation from Argentine and India (table), 160; in Canada, 160-1
Wine, 193; imports of, 193; consumption of, 193-4; production of (table), 194; capital, 195

LIST OF TABULAR STATISTICS

	PAGE
Traffic passing through Argentine ports, 1907-8	83
Produce entering Buenos Ayres market, 1905-8	85
Inward and outward trade of port of Buenos Ayres	85
Railways, mileage of	93
„ general statistics of	94
„ gauge, mileage and dividends	96-7
„ freight, cost of	99
„ mileage of, comparative	102
„ rolling stock and its capacity	111

	PAGE
Population of Provinces and Territories	113-4
Immigration and emigration, 1904-8	120
„ 1897-1908	120
Progress of cereal production, 1888-1905	135
Production of cereals, per province	137
Area of land under cultivation in five regions	141
Imports of agricultural machinery	146
Agricultural machinery required by farmer cultivating 250 acres of wheat	148
Approximate expenses and profits of the same	149
Wheat, the world's production, 1894-1907	154
„ distribution of crops, 1894-1907	155
„ produced in the United States, 1877-1907	158
„ exported from the United States, 1879-1902	159
„ Argentine and Indian exportation compared	160
Census, cattle, etc., according to, 1888, 1895, 1908	169
„ number of different animals according to	171
Cattle, analytical statistics of, 1908	171
„ horses, etc., values of, 1895, 1908	172
„ horses, etc., table of national and comparative possessions	172
„ „ „ „ values	173
Sugar-cane, outgoings and receipts on 12 acres	189
Wine, national and comparative production of	195
Tobacco, area planted with, 1895, 1907	196
Maté, importation of	198
Trade: exports, imports, population and commercial balance, 1861-1908 .	213
„ exports, excess of	214
„ exports and imports of bullion	218
Imports and countries of origin, 1906-1909	218
„ analysis of, 1906-1909	220
Exports, destination of, 1906-1909	221
„ increase of various branches, 1906-1909	227
„ of meat, chilled and frozen	229
„ of butter	241-2
Breweries, consumption and production, 1902-1907	243
Tramways, horse and electric, of Buenos Ayres, increase of takings, 1901-1908	257
Factories, statistics of	258
Industries, various	259
Banks, accounts of principal	265
„ statistics of	268
Bank of the Nation, accounts of, 1904-1908	272
„ of the Province of Buenos Ayres, accounts of, 1906-1908	274
Banks, mortgage, capital of	277
Bourse, operations of, 1895-1908	283-4
„ value of securities quoted on	284
Companies, floated in 1905-8, capital of	291
Debt, national or public, 1909	312
„ internal, 1909	322
„ external and internal	323
„ interest on	324
Securities, summary of Argentine and capital, represented by	352-3
„ revenue of Argentine	355-6
Capital, English, invested in Argentine	358
„ French, invested in Argentine	361
Agricultural and pastoral property, total value of, 1908	372

UC SOUTHERN REGIONAL LIBRARY FACILITY



AA 000 774 085 5

